

HYDROLOGIC MONITORING IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, MISSISSIPPI-ALABAMA, FISCAL YEAR 1988

By Fred Morris III

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**Jackson, Mississippi
1991**

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CONVERSION FACTORS AND VERTICAL DATUM

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
inch (in.)	25.40	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
square mile (mi ²)	2.590	square kilometer
acre-foot (acre-ft)	1,233	cubic meter
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second
gallon per minute (gal/min)	0.06308	liter per second
micromho per centimeter at 25 °Celsius (umho/cm at 25 °C)	1.000	microsiemens per centimeter at 25 °Celsius

To convert degrees Celsius (°C) to Fahrenheit (°F), use the following:

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F}-32)$$

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

HYDROLOGIC MONITORING IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, MISSISSIPPI- ALABAMA, FISCAL YEAR 1988

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ABSTRACT

This report, the fifteenth in a series of annual reports, presents hydrologic data collected in the area of the Tennessee-Tombigbee Waterway during the fiscal year ending September 30, 1988. Included in this report are data on ground-water levels; surface-water stage, discharge, and quality; and disposal-area water levels and water quality. These data were obtained at the request of the U.S. Army Corps of Engineers, Mobile District, as part of a comprehensive program to monitor the hydrologic effects of construction and operation of the Waterway.

PROGRAM CHANGES FOR 1988

For Fiscal Year 1988 (FY88), the number of wells in the ground-water network was reduced from 279 to 267, and the ground-water-quality sampling was discontinued. Beginning in FY88, water-quality samples were analyzed by the Tennessee Valley Authority (TVA) water-quality laboratory in Chattanooga, Tenn.

Explanations furnished by TVA concerning their quality-assurance programs are included in the Quality Assurance section of this report. Also, laboratory data tables furnished by TVA are printed in an appendix.

HYDROLOGIC MONITORING

Surface-water sites and observation wells in the original hydrologic monitoring network, used to define hydrologic conditions in the area of the Tennessee-Tombigbee Waterway prior to construction, are described by Brahana and others (1974) in the U.S. Army Corps of Engineers report, "First Supplemental Environmental Report, Continuing Environmental Studies, Tennessee-Tombigbee Waterway, Alabama and Mississippi." The present hydrologic monitoring network includes:

- Major aquifers that may have been stressed by the Waterway construction and operation;
- Surface-water sites near locks and dams where the effects of construction may have been greatest, or at sites of inflow or outflow;
- Areas of known or suspected hydrologic problems;
- Selected sites on and near Pickwick Lake and Demopolis Lake.

The purpose of the present hydrologic monitoring network is to document changes in the hydrologic environment that may occur during operation of the Waterway. The locations of all the hydrologic monitoring sites in the vicinity of the Waterway at which data have been collected since the beginning of the project are shown in figures 1-10, except for a few sites which are not shown because of the limited coverage of the maps (furnished by the U.S. Army Corps of Engineers, Mobile District).

Ground Water

Network

The present ground-water network consists of 267 wells in the regional aquifers and the shallower alluvial and terrace aquifers. The relation between shallow water-bearing units and regional aquifers is described by Brahana and others (1974). The descriptions of wells in the network are tabulated in Appendix A.

Levels

Under natural conditions, water levels in wells fluctuate seasonally and reflect recharge to and discharge from aquifers. Water-level fluctuations ranging from less than 1 foot to more than 10 feet per year have been observed in the aquifers in the study area. Water-level fluctuations generally were larger in the alluvial and terrace aquifers than in the regional aquifers.

During FY88, water levels in all 267 observation wells in the network were scheduled to be measured quarterly by the U.S. Geological Survey (USGS). However, 11 wells (14A, 14C, 23D, 23I, 23L, 23O, 42A, 45A, GW94, GW97, and 6DP164) were either dry or could not be measured because of obstructions in the wells. Hydrographs showing water-level variations in the wells for the period of USGS record are presented in Appendix A.

TENNESSEE

PICKWICK LOCK & DAM

CORINTH O

Figure 2

BAY SPRINGS LOCK & DAM

Figure 3

LOCK E

LOCK D

LOCK C

Figure 4

O TUPELO

Figure 5

ALABAMA

Figure 6

LOCK A

Figure 7

ABERDEEN LOCK & DAM

Figure 8

COLUMBUS LOCK & DAM

COLUMBUS

MISSISSIPPI

Figure 9

Figure 10

ALICEVILLE LOCK & DAM

GAINESVILLE LOCK & DAM

DEMOPOLIS LOCK & DAM

TENNESSEE-TOMBIGBEE WATERWAY
HYDROLOGIC MONITORING PROGRAM

INDEX MAP

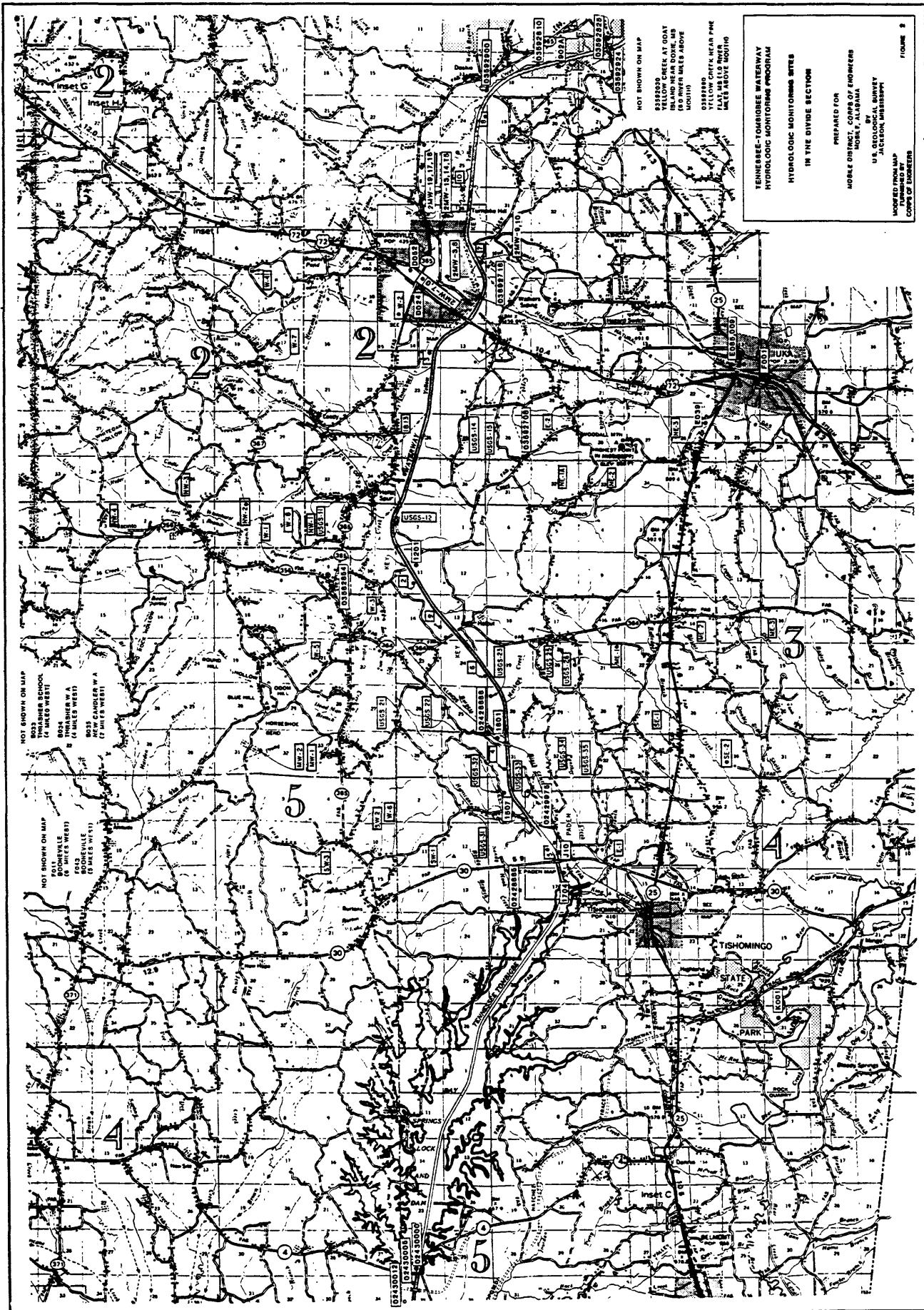
PREPARED FOR

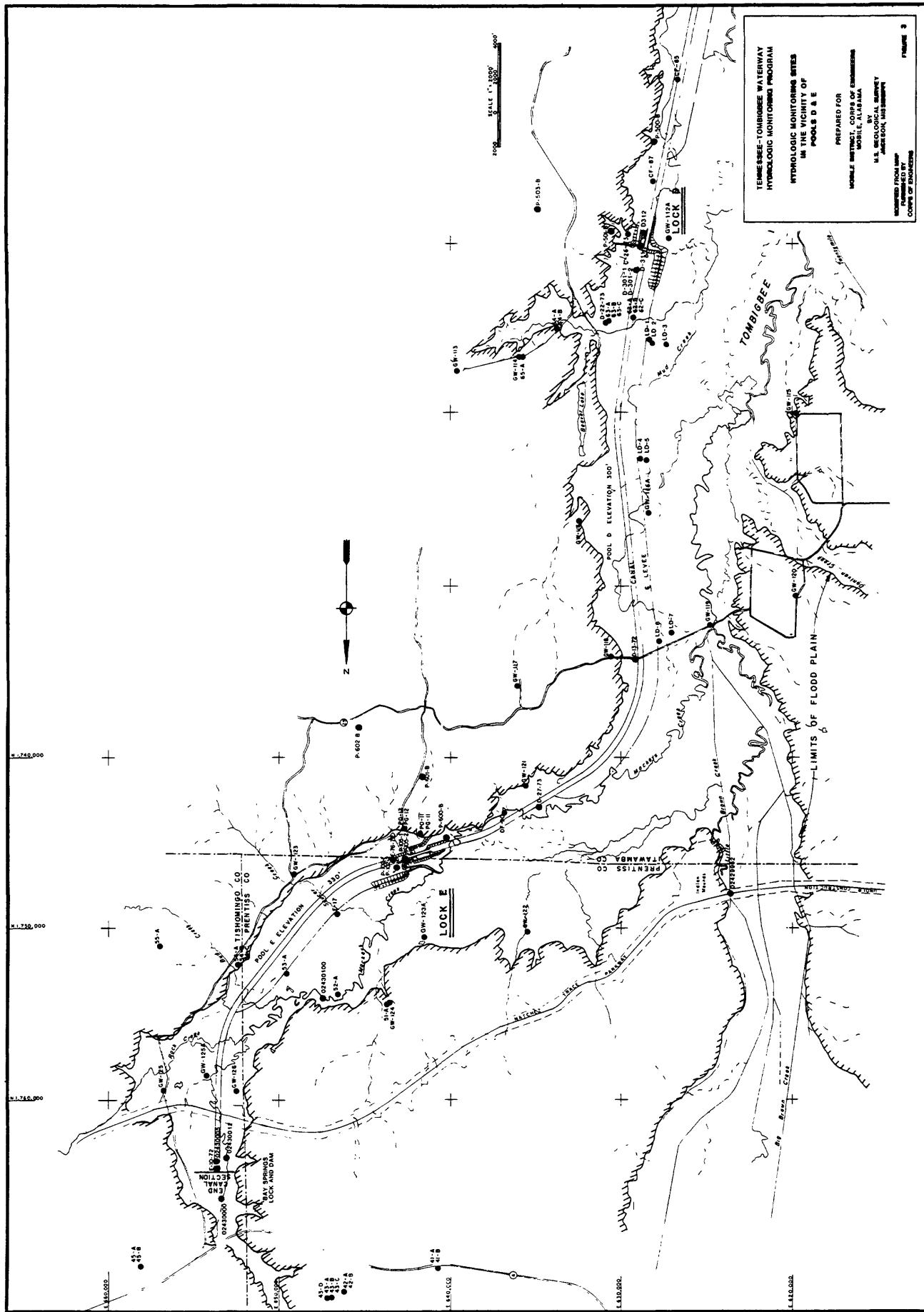
MOBILE DISTRICT, CORPS OF ENGINEERS
MOBILE, ALABAMA

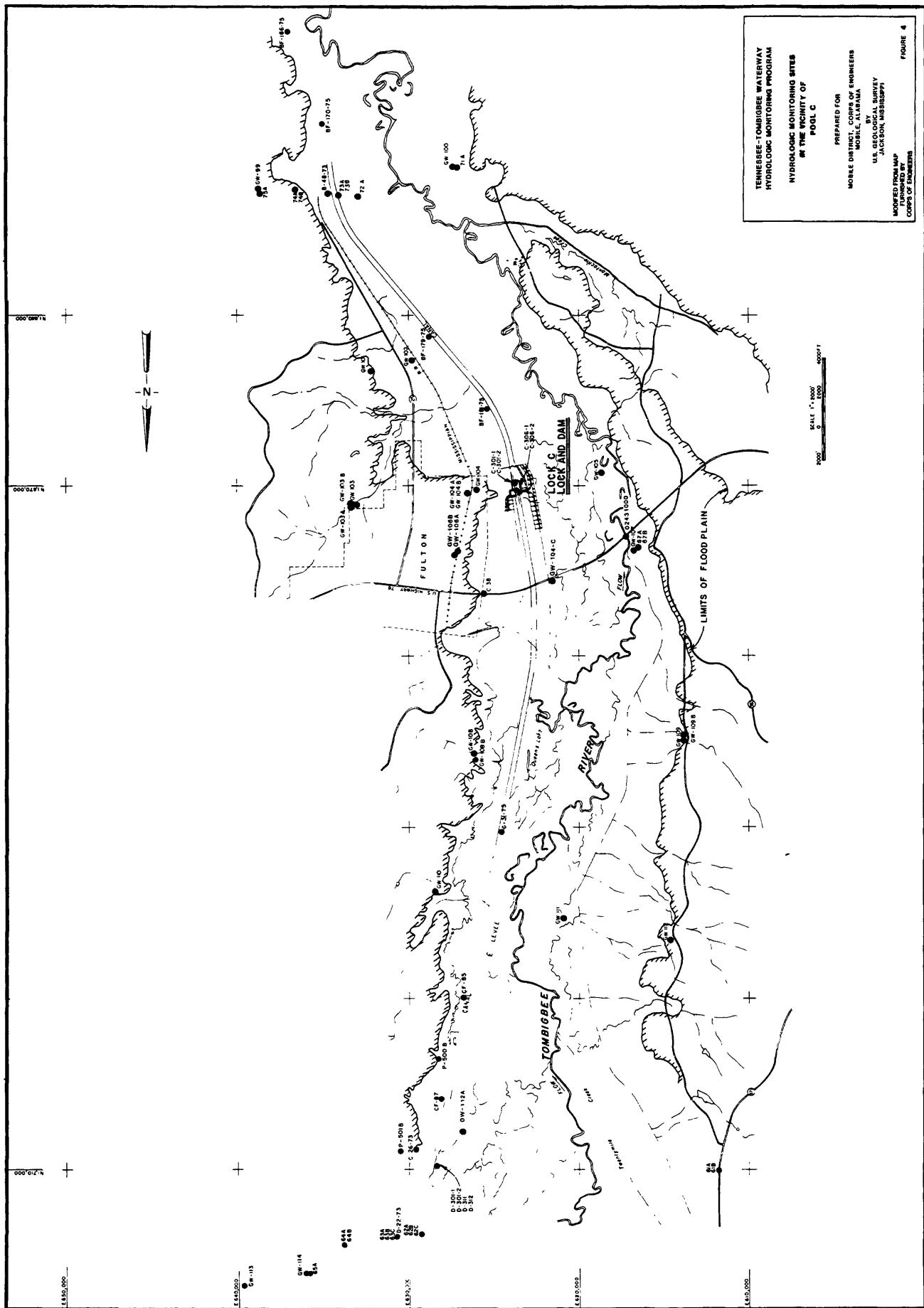
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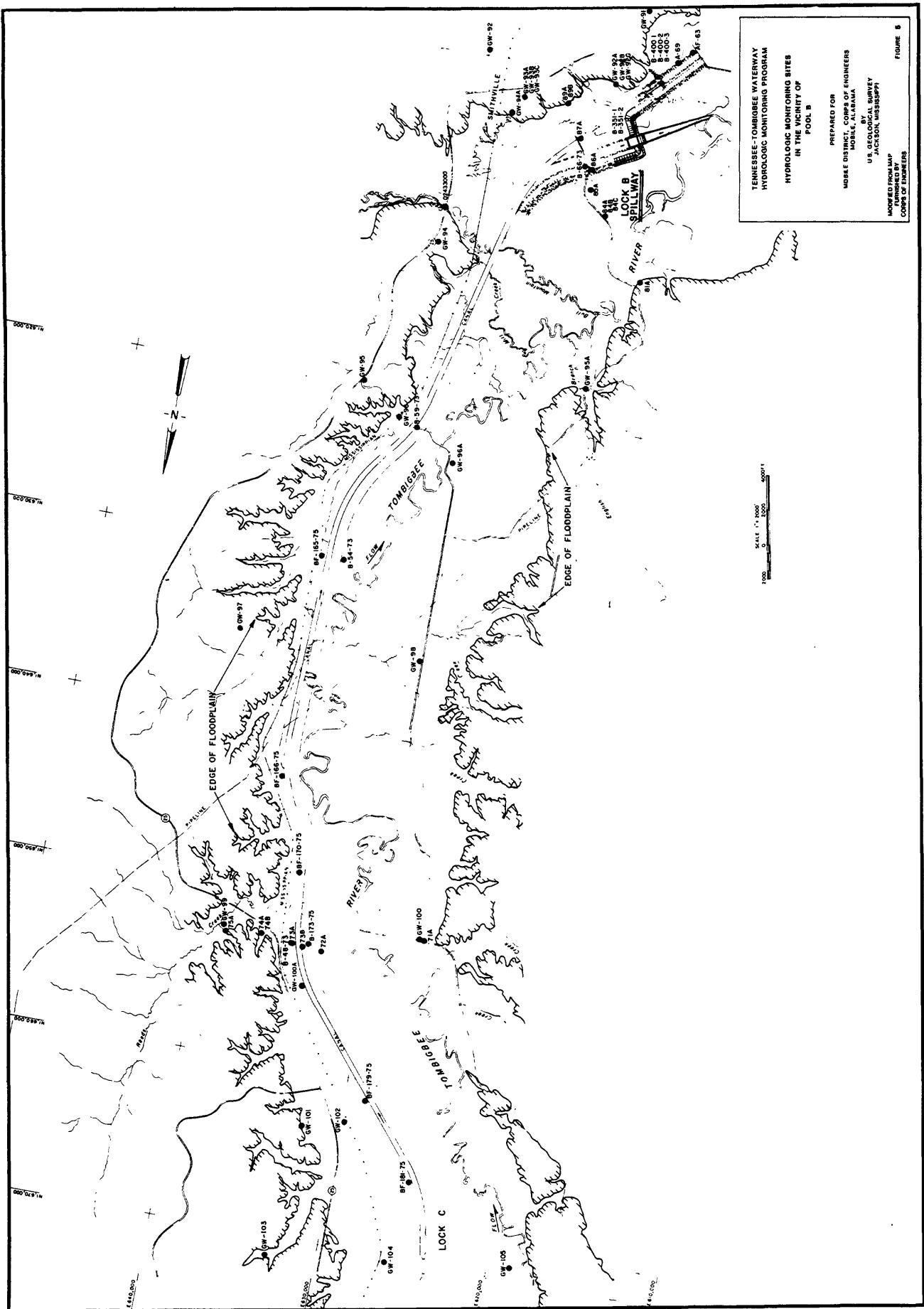
U.S. GEOLOGICAL SURVEY
JACKSON, MISSISSIPPI

FIGURE 1



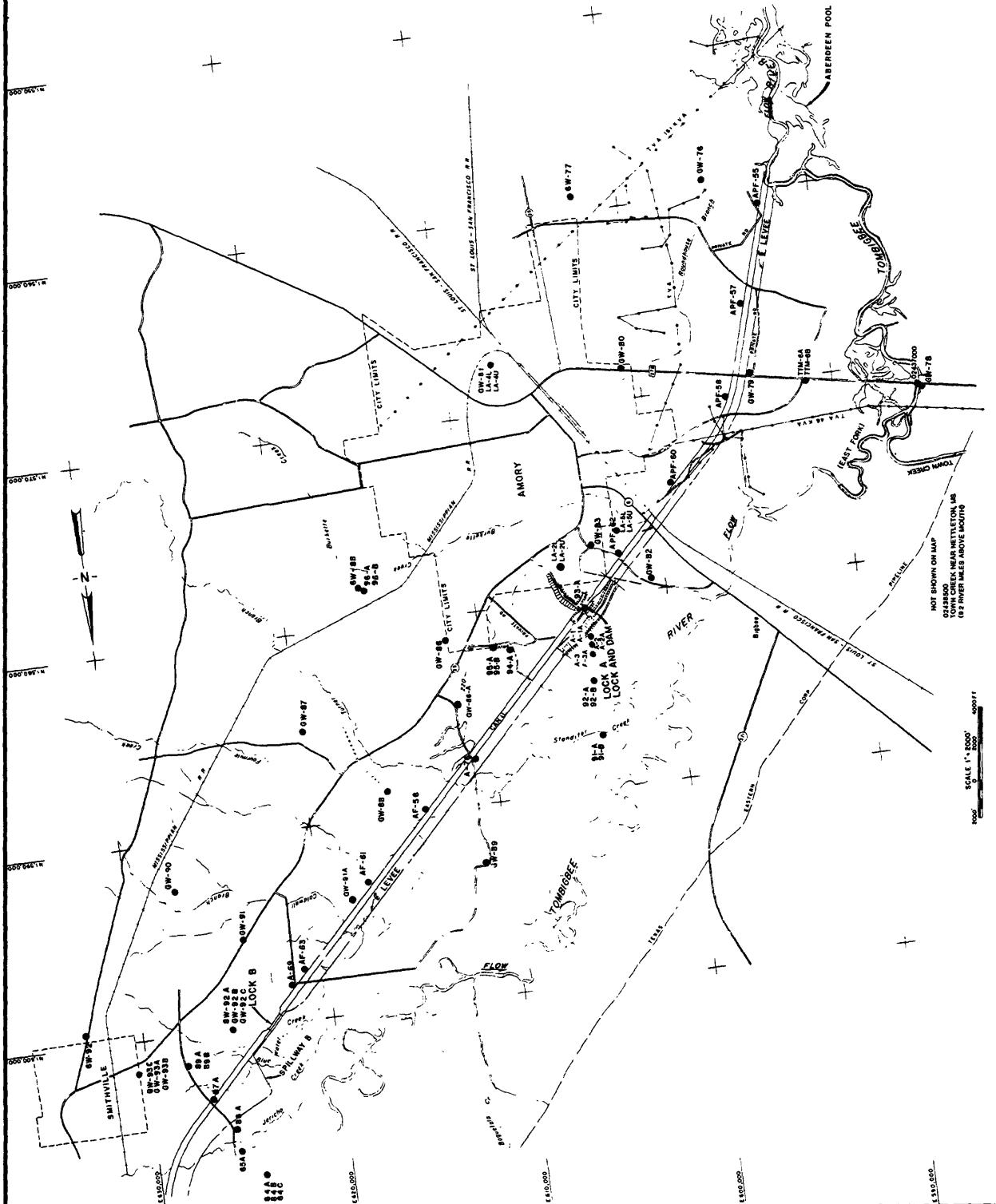


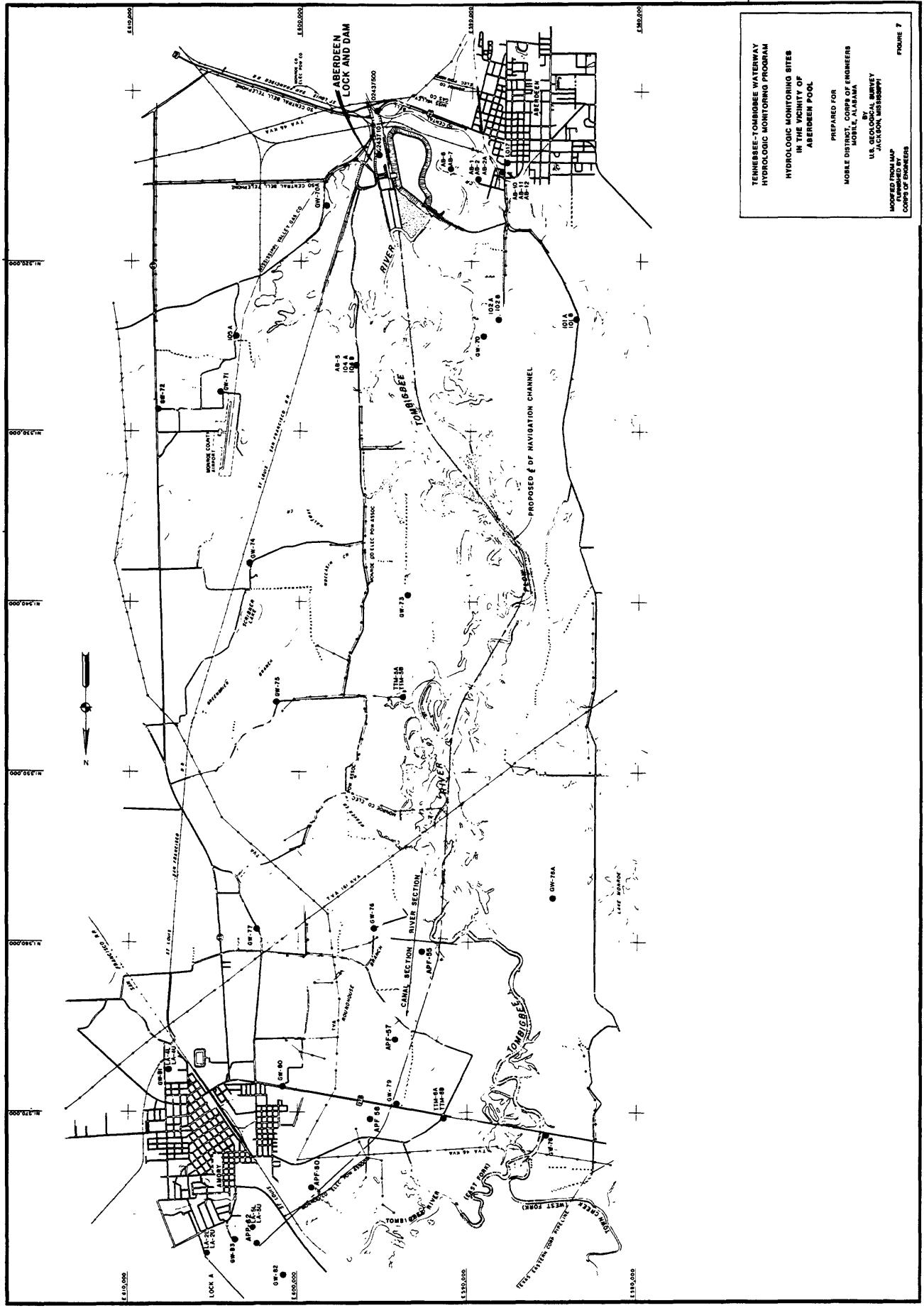


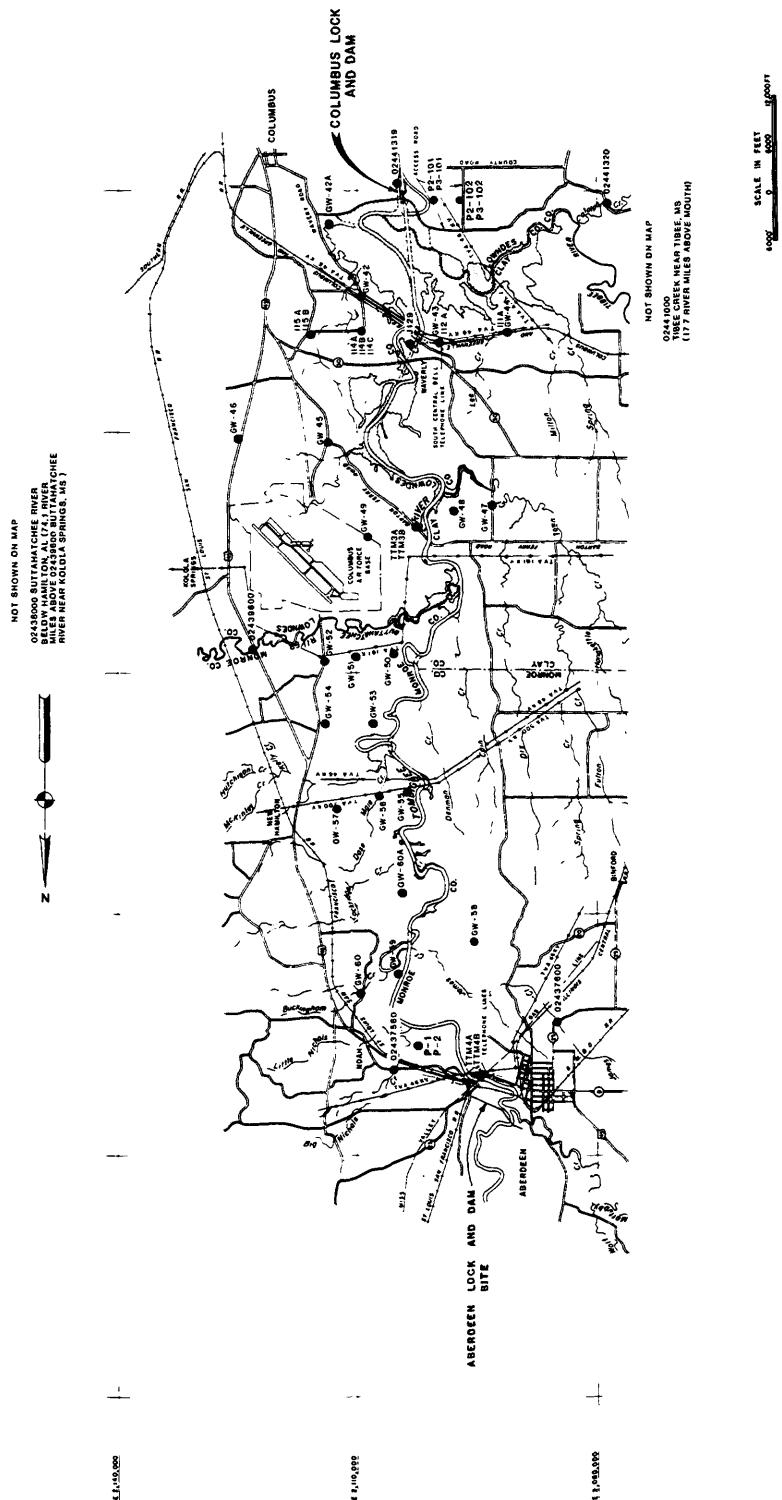


TENNESSEE-TOMBIGEE WATERWAY
 HYDROLOGIC MONITORING PROGRAM
 HYDROLOGIC MONITORING SITES
 IN THE VICINITY OF
 POD A
 PREPARED FOR
 MOBILE DISTRICT, CORPS OF ENGINEERS
 MOBILE, ALABAMA
 BY
 U.S. GEOGRAPHICAL SURVEY
 JACKSON, MISSISSIPPI
 MODIFIED FROM MAP
 DRAWN AND MAILED BY
 CORPS OF
 ENGINEERS

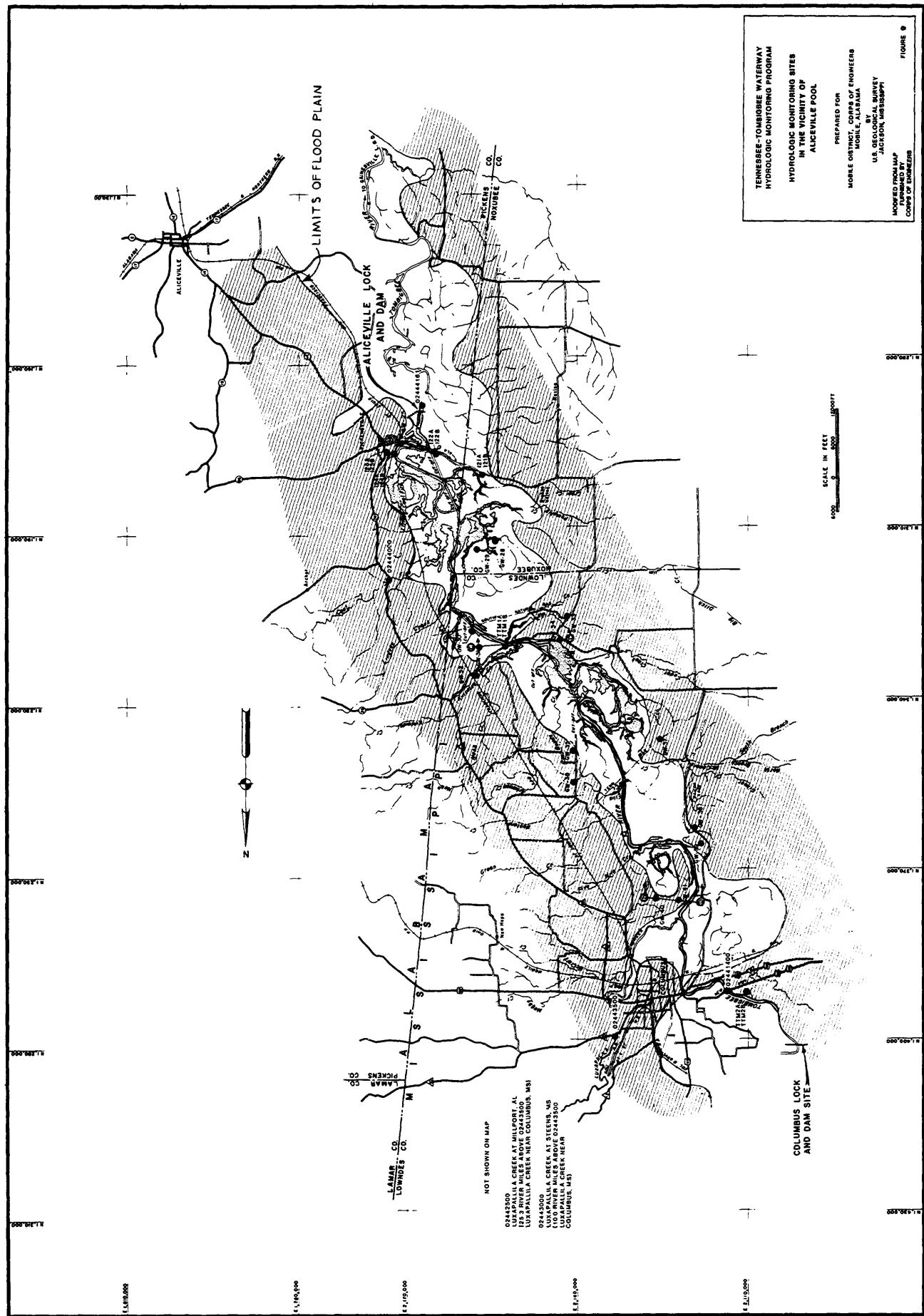
FIGURE 8

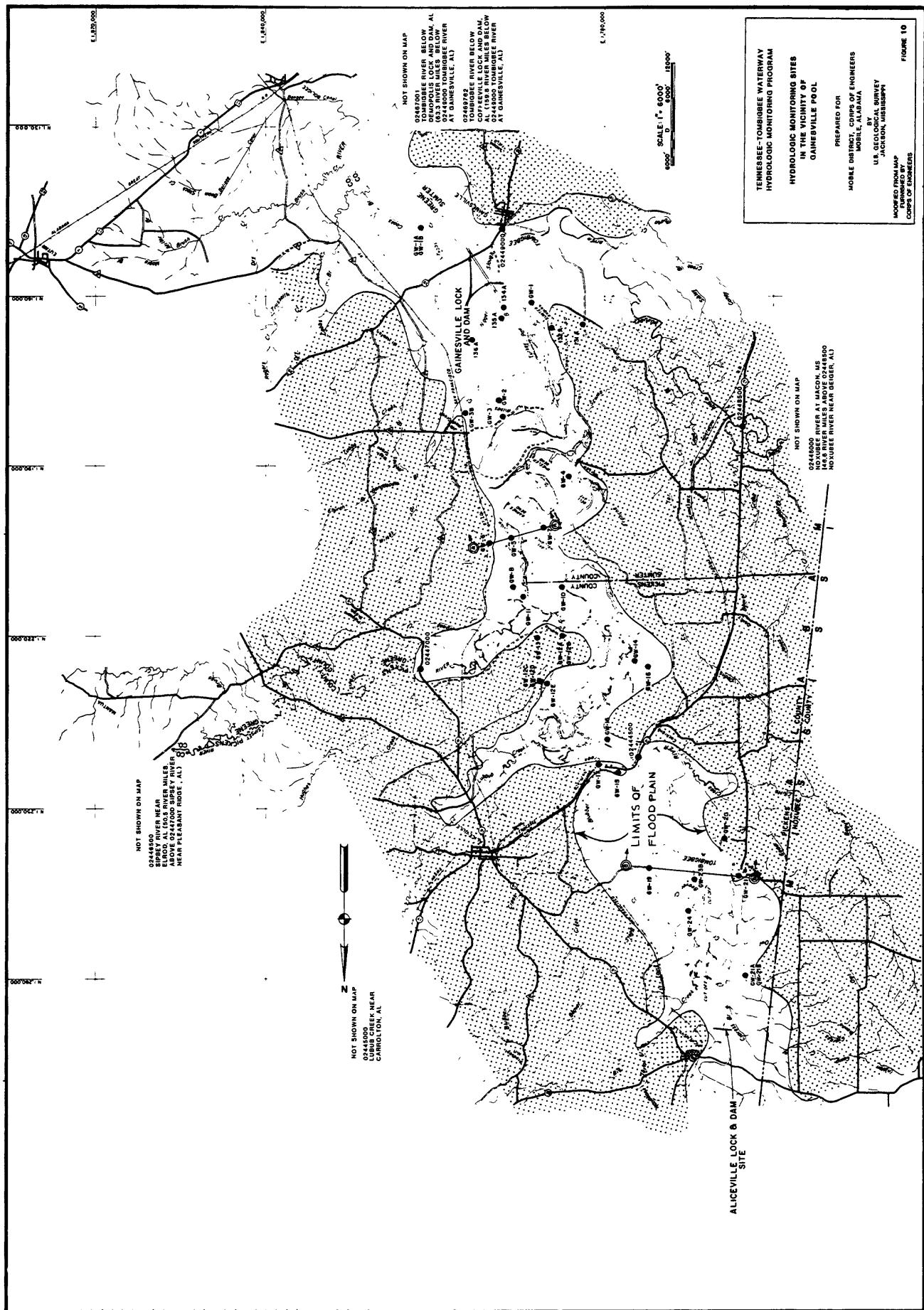






The cover of the map features the title "TENNESSEE-TOMBIGEE WATERWAY HYDROLOGIC MONITORING PROGRAM" at the top left. Below it is the subtitle "HYDROLOGIC MONITORING SITES IN THE VICINITY OF COLUMBUS POOL". To the right, there's a vertical column of text: "PREPARED FOR MOBILE DISTRICT, CORPS OF ENGINEERS MOBILE, ALABAMA BY U.S. SURVEY JACKSON, MISSISSIPPI". At the bottom right, it says "MODIFIED FROM MAP RUNNING BY COOPER & COMPANY ENGINEERS".





Surface Water

Network

The surface-water network, which is designed to monitor water quality, currently consists of 26 sites in the area of the Tennessee-Tombigbee Waterway. Descriptions of these sites are tabulated in Appendix B.

Stage and Discharge

Surface-water stage and discharge data were collected at numerous sites (including most sites at which water-quality data were collected) in the area of the Tennessee-Tombigbee Waterway. The collection of stage and discharge data at these sites was funded by cooperative programs with various State and Federal agencies. Data collected at these sites are available either in the Jackson, Miss., or Tuscaloosa, Ala., office of the USGS.

Quality

Water-quality data were collected by the USGS at 26 surface-water sites in the network during the 1988 reporting period (Appendix B). One site, 334219088281935 TTW Columbus Lake McKinley Creek Bend SR 50A, was added at the beginning of the 1988 reporting period; and one site, 02437600 James Creek at Aberdeen, Miss., was discontinued.

Data for 02441000 Tibbee Creek near Tibbee, Miss., may not represent water-quality conditions upstream of the sampling site. Normal pool elevation of 163.00 feet above sea level for Columbus Lake creates a stage of about 8.8 feet at the Tibbee Creek site, resulting in variable backwater conditions. Measurements of stream discharge were not obtained during backwater conditions.

Results of the TVA laboratory analyses are tabulated in Appendix TVA.

Data for suspended-sediment concentration, particle-size distribution of suspended sediment, and particle-size distribution of stream bed material were collected at 02448000 Noxubee River at Macon, Miss. Data for suspended-sediment concentration and particle-size distribution of stream bed material were collected at 02436500 Town Creek near Nettleton, Miss. Specific conductance and water temperature were measured daily and miscellaneous samples were collected periodically at two sites on the lower Tombigbee River: 02449000 Tombigbee River at Gainesville, Ala. (monthly), and 02469762 Tombigbee River below Coffeeville Lock and Dam, Ala. (quarterly). The results of these USGS measurements and analyses are presented in Appendix B. Collection of these data was funded by cooperative agreements with various State and Federal agencies.

Disposal Area

The present disposal area network consists of two wells in disposal area 1704 (fig. 2). One well is open in the cast overburden material and the other is open in the natural material below the cast overburden material. The purpose of data collection is to monitor water levels in areas of cast overburden material and the quality of the water passing through the material.

Water samples were collected and water levels were measured annually by the USGS during the 1988 reporting period. Descriptions of the two wells and data collected at those sites are tabulated in Appendix C. The results of TVA laboratory analyses of these samples are tabulated in Appendix TVA.

QUALITY ASSURANCE

U.S. Geological Survey

Ground-Water Levels

The collection, analysis, and computation of ground-water level records are conducted in accordance with techniques and procedures established by the USGS and are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

Surface-Water Stage and Discharge

The collection, analysis, and computation of surface-water stage and discharge records are conducted in accordance with procedures described in a series entitled "Techniques of Water-Resources Investigations of the U.S. Geological Survey" (TWRI). Field activities are presented in three chapters entitled "General Procedures for Gaging Streams" (Carter and Davidian, 1968); "Stage Measurements at Gaging Stations" (Buchanan and Somers, 1968); and "Discharge Measurements at Gaging Stations" (Buchanan and Somers, 1969); and more recently in Water Supply Paper 2175, "Measurement and Computation of Streamflow: Volume 1, Measurement of Stage and Discharge" (Rantz and others, 1982). Daily discharge is computed in conformance with procedures described in Water Supply Paper 2175, "Measurement and Computation of Streamflow: Volume 2, Computation of Discharge" (Rantz and others, 1982). All procedures are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

Water Quality

Procedures used by the USGS in the collection and analysis of samples of water and bottom materials are in conformance with the methods of laboratory analysis and sample preservation and handling described in TWRI Chapter A1, Book 5, "Methods for Determination of Inorganic Substances in Water and Fluvial Sediments" (Fishman and Friedman, 1985).

Procedures used for water-quality field data collection are in accordance with techniques established by the USGS and are within the guidelines recommended in the "National Handbook of Recommended Methods for Water-Data Acquisition" (Office of Water Data Coordination, 1977).

Tennessee Valley Authority

Aquatic Biology

The procedures used in the collection and laboratory analysis of aquatic biological samples--phytoplankton, zooplankton, periphyton--for community numbers and autotrophic indices, and benthic macroinvertebrates, are conducted in conformance with standard TVA procedures. The applicable procedures are described in "Field Operations Biological Resources Procedures Manual" (TVA, 1983) and include the following:

- Procedure NR OPS-FO-BR-21.4, "Sample Collection - Phytoplankton"
- Procedure NR OPS-FO-BR-21.5, "Sample Collection - Periphyton"
- Procedure NR OPS-FO-BR-21.6, "Sample Collection - Zooplankton"
- Procedure NR OPS-FO-BR-21.11, "Qualitative Sample Collection - Benthic Macroinvertebrates"
- Procedure S&F OPS-FO-BR-21.12, "Quantitative Sample Collection - Benthic Macroinvertebrate Sampling with a Ponar Dredge"
- Procedure NR OPS-FO-BR-22.1, "Receipt and Handling of Biological Samples"
- Procedure NR OPS-FO-BR-22.2, "Identification and Enumeration of Phytoplankton"
- Procedure NR OPS-FO-BR-22.3, "Identification and Enumeration of Periphyton"
- Procedure NR OPS-FO-BR-22.4, "Identification and Enumeration of Zooplankton"
- Procedure NR OPS-FO-BR-22.5, "Identification, Enumeration, and Wet Weight Biomass of Benthic Macroinvertebrates"
- Procedure NR OPS-FO-BR-22.6, "Biomass/Chlorophyll Ratio for Periphyton"
- Procedure NR OPS-FO-BR-22.9, "Coding and Verifying Aquatic Biological Laboratory Data Sheets."

In addition to the collection or analytical protocols, these procedures contain the quality control and quality-assurance techniques used by the TVA's Aquatic Biology Laboratory.

Water Quality

The procedures used in the laboratory analysis of water-quality constituents are conducted in conformance with standard TVA procedures. The applicable procedures include the following:

Surface Sampling

Water	Description	Reference
TNH ₄ -N	Colorimetric, Automated Phenate	EPA Method 350.1
TNO ₂ +NO ₃ -N	Colorimetric, Automated Cadmium Reduction	EPA Method 353.2
TPO ₄ -P	Colorimetric, Automated Block Digestor	EPA Method 365.4
DPO ₄ -P (total diss. ortho PO ₄)	Colorimetric, Automated Ascorbic Acid	EPA Method 365.1
TON	Calculated	—
TIN	Calculated	—
TKN	Colorimetric, Semi Automated Block Digestor	EPA Method 351.2
Color, True	Colorimetric, Platinum-Cobalt	EPA Method 110.2
Turbidity	Nephelometric	EPA Method 180.2
Alkalinity	Titrimetric (pH 4.5)	EPA Method 310.1
Total MN	Inductively Coupled Plasma	EPA Method 200.7
Diss MN	Inductively Coupled Plasma	EPA Method 200.7
Total Fe	Inductively Coupled Plasma	EPA Method 200.7
Diss Fe	Inductively Coupled Plasma	EPA Method 200.7

Sediment

Total As	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
Total Cd	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
Total Cr	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
total Co	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
Total Cu	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
Total Pb	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7
Total Hg	Cold Vapor	EPA Method 245.2
Total Zn	HNO ₃ + HCL Digestion:Inductively Coupled Plasma	EPA Method 200.7

Grain Size – Sieve (>63u) and Sedigraph (<63u) a. sieve (>63u) wetseive (Guy, 1969), b. sedigraph (<63u) sedigraph (Micromeritics Instrument Corporation, 1978)

Priority Pollutants (Pesticides, PCB Scan, Organochlorine herbicides)

a. Pesticides	Sonicator extraction; GC/ES	EPA Method 608
b. PCB's	Sonicator extraction; GC/ES	EPA Method 608
c. Organochloride Herbicides	Sonicator; Derivatization; GC/EC	USGS Method 05105-83

Disposal Area Wells

STORET	Parameter	Description	Reference
00080	Color, true	Colorimetric, Platinum Cobalt	EPA Method 110.2
00410	Total Alkalinity as CaCO ₃	Titrimetric (PH 4.5)	EPA Method 180.2
00631	Dissolved NO ₃ +NO ₂ as N	Colorimetric, Automated Cadmium Reduction	EPA Method 180.2
00915	Dissolved Ca	Inductively Coupled Plasma	EPA Method 200.7
00925	Dissolved MG	Inductively Coupled Plasma	EPA Method 200.7
00930	Dissolved NA	AA, Direct Aspiration	EPA Method 273.1
00935	Dissolved K	AA, Direct Aspiration	EPA Method 258.1
00946	Dissolved SO ₄ as SO ₄	Colorimetric, Automated Methyl Tymol Blue	EPA Method 275.2
01046	Dissolved Fe	Inductively Coupled Plasma	EPA Method 200.7
01055	Total Mn	Inductively Coupled Plasma	EPA Method 200.7

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APPENDIXES

EXPLANATION OF CODES AND ABBREVIATIONS CONTAINED IN DATA TABLES
IN THE APPENDIXES

PRINCIPAL AQUIFER

Geologic unit code	Aquifer name and age
110ALVM	Quaternary alluvium, Quaternary
110TRCS	Undifferentiated terrace deposits, Quaternary
211TBGB	Tombigbee Sand Member of Eutaw Formation, Upper Cretaceous
211EUTW	Eutaw Formation, Upper Cretaceous
211EUTWR	Eutaw Formation (Restricted), Upper Cretaceous
211EUTWL	Lower Eutaw Formation, Upper Cretaceous
211MCNSN	McShan Formation, Upper Cretaceous
211GORD	Gordo Formation, Upper Cretaceous
330MSSP	Mississippian System, Mississippian

HYDROLOGIC UNIT

An eight-digit hydrologic unit code refers to a specific drainage basin as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps (Seaber and others, 1987).

WATER-QUALITY REMARKS

Remark Code	Remark
< NOT SAMPLED	Actual value is known to be less than the value shown Station sampled during previous years but not sampled during FY88

PARAMETERS FOR CHLOROPHYLL/BIOMASS DATA

PAM2	Pheophytin a per square meter
PI	Pheophytin Index
CAM2	Chlorophyll a per square meter
CBM2	Chlorophyll b per square meter
CCM2	Chlorophyll c per square meter
AFOW	Ash free organic weight
AI	Autotrophic Index
CCAM2	Corrected chlorophyll a per square meter
CAI	Corrected autotrophic index
.	Indicates that the analysis for that parameter was invalid.*

* Any other variables calculated using the invalid parameter are to be considered invalid also.

APPENDIX A

GROUND-WATER DATA

APPENDIX A

GROUND-WATER DATA

DESCRIPTIONS OF WELLS

DESCRIPTIONS OF GROUND-WATER WELLS

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
ALCORN COUNTY								
L034	USCE NW1-1	211GORD	NENES32T03SR09E	04/28/1978	500	280	1.50	--
L036	USCE NW1-3	211EUTW	NESES32T03SR09E	05/12/1978	500	207	1.50	--
L038	USCE NW2-2	211GORD	NWNES06T04SR09E	04/06/1978	600	400	1.50	--
L040	USCE NW2-3	211EUTW	NWNES06T04SR09E	04/13/1978	580	327	1.50	--
L042	USCE NW3-2	211GORD	NENWS01T04SR08E	04/28/1980	590	398	1.50	--
L043	USCE NW3-3	211EUTW	NENWS01T04SR08E	06/09/1980	590	320	1.50	--
L047	USCE W4-2	211EUTW	SESES06T03SR09E	04/02/1981	600	259	3	--
L048	USCE W4-3	211EUTW	SESES06T03SR09E	04/01/1981	600	315	3	--
L049	USCE W7-1	211GORD	SWSWS17T03SR09E	03/26/1982	600	430	1.50	--
L050	USCE W7-2A	211EUTW	SWSWS17T03SR09E	--/--/1981	600	380	1.50	--
L051	USCE W8-1	211GORD	SESES05T04SR09E	03/21/1982	537	340	1.50	--
L052	USCE W8-2	211GORD	SESES05T04SR09E	03/28/1983	537	263	3	--
ITAWAMBA COUNTY								
A023	USCE GW118	211MCSN	SENES36T07SR08E	07/08/1975	325.70	23	1.50	--
A024	USCE GW119	110ALVM	NESES35T07SR08E	07/10/1975	295	38	1.50	--
A025	USCE GW120	110ALVM	SESES34T07SR08E	07/14/1975	297.20	21	1.50	--
B005	USCE GW117	110ALVM	SWSWS29T07SR09E	07/16/1975	359.20	21	1.50	--
B008	USCE P601B	211GORD	SWSWS21T07SR09E	05/16/1978	440	187	1.50	--
B009	USCE P602B	211GORD	NWNES28T07SR09E	06/23/1978	450	200	1.50	--
D039	USCE CF87	211EUTW	NWSES25T08SR08E	10/01/1975	271.10	66	1.50	--
D040	USCE GW110	110ALVM	NENES12T09SR08E	07/02/1975	282.70	23	1.50	--
D041	USCE GW112A	110ALVM	NENWS25T08SR08E	06/19/1975	275	28	1.50	--
D042	USCE GW115	110ALVM	SESES10T08SR08E	07/15/1975	299.20	29	1.50	--
D043	USCE GW116	211EUTW	SEWSWS06T08SR09E	07/08/1975	333.50	30	1.50	--
D044	USCE GW116A	110ALVM	SWSES01T08SR08E	06/17/1980	285	25	1.50	--
D045	USCE P500B	211GORD	SWSES25T08SR08E	08/28/1978	290	124	1.50	--
D046	USCE P501B	211GORD	SESES24T08SR08E	05/01/1978	308.50	152	1.50	--
E005	USCE 65A	211GORD	NESES18T08SR09E	05/18/1972	325	130	4	7.0
E009	USCE GW113	110ALVM	SWNES17T08SR09E	07/07/1975	329.50	26	1.50	--
E010	USCE GW114	110ALVM	NESES18T08SR09E	07/03/1975	311.70	12	1.50	--
E011	USCE P503B	211GORD	NWNES30T08SR09E	05/15/1978	420	221	1.50	--
G065	USCE 67A	211GORD	SWSES27T09SR08E	08/12/1975	270	179	4	--
G066	USCE 67B	211EUTW	SWSES27T09SR08E	08/13/1975	270	71	4	--
G067	USCE GW106B	211GORD	SWSES25T09SR08E	04/19/1978	284	175	6	--
G068	USCE GW106A	110ALVM	SWSES25T09SR08E	04/19/1978	290	10	2	--
G070	USCE GW104C	110ALVM	NWWS26T09SR08E	01/01/1980	260	24	2	--
G072	USCE C38	110ALVM	SWNWS25T09SR08E	04/12/1973	263.20	33	1.50	--
G074	USCE GW104A	211GORD	NESWS36T09SR08E	04/20/1978	290	88	1.50	--
G075	USCE GW104B	211GORD	NESWS36T09SR08E	04/20/1978	290	138	1.50	--
G076	USCE GW105	110ALVM	NESES34T09SR08E	07/11/1975	254.60	29	1.50	--
G077	USCE GW107	110ALVM	SWSES27T09SR08E	07/02/1975	273.30	31	1.50	--
G078	USCE GW108	211EUTW	NESWS13T09SR08E	07/02/1975	284.50	14	1.50	--
G079	USCE GW108B	211GORD	NESWS13T09SR08E	04/27/1978	284.50	150	1.50	--
G080	USCE GW109	110ALVM	NWWS15T09SR08E	07/03/1975	278.20	24	1.50	--
G081	USCE GW109B	211GORD	NWWS15T09SR08E	05/05/1978	278.20	198	1.50	--
G082	USCE GW111	110ALVM	SESES02T09SR08E	07/23/1975	270.90	35	1.50	--
G083	USCE GW112	110ALVM	NWWS03T09SR08E	09/01/1975	292.90	24	1.50	--
G084	USCE GW104	110ALVM	SWNWS36T09SR08E	07/01/1975	240	26	2	--
K039	USCE 71A	211GORD	NENWS24T10SR08E	06/20/1972	273	170	4	7.0
K041	USCE GW100	110ALVM	NENES24T10SR08E	06/24/1975	269.20	21	1.50	--
K042	USCE BF179-75	211GORD	NENES12T10SR08E	01/14/1976	250	46	2	--
L014	USCE 74A	211GORD	SWSWS17T10SR09E	06/22/1972	270	150	4	200
L016	USCE 75A	211GORD	SWSWS17T10SR09E	06/22/1972	300	144	4	195
L017	USCE 72A	110ALVM	NWSES18T10SR09E	06/11/1972	249	21	4	7.0
L021	USCE BF170-75	211EUTW	NESES19T10SR09E	08/20/1975	247.50	67	1.50	--
L022	USCE BF173-75	211GORD	NESES18T10SR09E	07/15/1975	252.20	51	1.50	--
L023	USCE GW99	110ALVM	SWSWS17T10SR09E	06/26/1975	282.80	30	1.50	--
L024	USCE GW100A	110ALVM	NWNWS18T10SR09E	07/08/1980	255	32	1.50	--
L025	USCE GW101	110ALVM	SEWSWS06T10SR09E	06/26/1975	304.80	21	1.50	--
L026	USCE GW102	110ALVM	SESES01T10SR08E	06/22/1975	277.10	21	1.50	--
N028	USCE 81A	211GORD	NESWS26T11SR08E	07/13/1972	246	180	4	8.0
N029	USCE GW95A	110ALVM	SENES23T11SR08E	06/16/1975	242.40	35	1.50	--
O010	USCE GW94	110ALVM	SESES20T11SR09E	06/18/1975	278	23	1.50	--
O011	USCE GW95	110ALVM	SWSWS17T11SR09E	06/19/1975	325.40	29	1.50	--
O012	USCE GW96	110ALVM	NWSES18T11SR09E	06/20/1975	262.90	23	1.50	--
O013	USCE GW96A	110ALVM	SWNWS20T11SR09E	06/22/1975	238.60	24	1.50	--
O014	USCE GW97	110ALVM	SEWSWS14T10SR09E	06/25/1975	393.90	60	1.50	--
O015	USCE GW98	110ALVM	SWSWS31T10SR09E	06/23/1975	267.20	23	1.50	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
MONROE COUNTY								
B068	USCE APF58	211EUTW	NENWS34T12SR19W	01/15/1976	210	60	2	--
C051	USCE 84A	211GORD	NWNWS36T11SR08E	06/29/1972	234	170	4	30
C052	USCE 84B	211GORD	NWNWS36T11SR08E	07/10/1972	234	110	4	10
C053	USCE 84C	110ALVM	NWNWS36T11SR08E	07/10/1972	234	27	4	10
C054	USCE 85A	110ALVM	SWNWS36T11SR08E	07/11/1972	235	21	4	18
C057	USCE 89A	211GORD	SWNES01T12SR08E	06/30/1972	245	166	4	20
C058	USCE 89B	211MCSN	SWNES01T12SR08E	07/06/1972	245	45	4	2.0
C061	USCE 91A	211MCSN	SWSWS17T12SR08E	07/--/1972	218	88	4	--
C062	USCE 92A	211GORD	NWSWS20T12SR08E	07/--/1972	216	200	4	--
C068	USCE 92B	110ALVM	NWSWS20T12SR08E	08/30/1972	216	19	4	7.0
C069	USCE 91B	110ALVM	SWSWS17T12SR08E	08/--/1972	218	20	4	4.0
C070	USCE 96B	110TRCS	SWSWS20T12SR18W	08/--/1972	257	16	24	--
C080	USCE TTM6A	211TBGB	NENES33T13SR19W	05/14/1975	210	65	4	--
C081	USCE TTM6B	110ALVM	NENES33T13SR19W	05/16/1975	210	38	6	--
C085	USCE A1A	110ALVM	SWSWS20T12SR08E	06/17/1982	215	5	1.50	--
C086	USCE A1	110ALVM	SWSWS20T12SR08E	06/17/1982	215	24	1.50	--
C087	USCE A2	110ALVM	NWNWS29T12SR08E	06/18/1982	215	29	1.50	--
C088	USCE A2A	110ALVM	NWNWS29T12SR08E	06/18/1982	215	5	1.50	--
C089	USCE A3	110ALVM	NWNWS29T12SR08E	06/21/1982	215	25	1.50	--
C090	USCE A3A	110ALVM	NWNWS29T12SR08E	07/01/1982	215	5	1.00	--
C092	USCE GW80	110ALVM	SWNES35T12SR19W	05/28/1975	236.40	33	1.50	--
C093	USCE GW81	110ALVM	NESES36T12SR19W	05/29/1975	235.70	25	1.50	--
C094	USCE GW83	110ALVM	SESES30T12SR08E	06/02/1975	213.20	33	1.50	--
C095	USCE GW85	110ALVM	SWSWS20T12SR18W	06/10/1975	257.60	26	1.50	--
C096	USCE GW86	110ALVM	NWNWS19T12SR18W	06/09/1975	247.10	24	1.50	--
C097	USCE GW86A	110ALVM	NESWS21T12SR08E	06/23/1980	210	31	1.50	--
C098	USCE GW87	110ALVM	SENWS16T12SR18W	06/18/1975	258	30	1.50	--
C099	USCE GW88	110ALVM	SWSWS15T12SR08E	06/05/1975	244.20	24	1.50	--
C100	USCE GW89	110ALVM	SESES09T12SR08E	06/04/1975	225.20	30	1.50	--
C101	USCE GW90	110ALVM	NENWS13T12SR08E	06/13/1975	270	26	1.50	--
C102	USCE GW91	110ALVM	SENES11T12SR08E	06/12/1975	261.30	23	1.50	--
C105	USCE GW92B	211EUTW	NWSWS01T12SR08E	04/14/1975	257.30	122	1.50	--
C106	USCE GW92C	211EUTW	NWSWS01T12SR08E	04/14/1975	257.40	100	1.50	--
C107	USCE LA2L	211GORD	SWNWS24T12SR19W	05/01/1975	220	147	1.50	--
C108	USCE LA2U	211EUTW	SWNWS24T12SR19W	05/02/1975	220	67	1.50	--
C109	USCE LA4L	211GORD	NESES36T12SR19W	05/03/1975	235	190	1.50	--
C110	USCE LA4U	211EUTW	NESES36T12SR19W	05/04/1975	235	122	1.50	--
C111	USCE LA5L	211GORD	SWSWS30T12SR08E	05/05/1975	210	205	1.50	--
C112	USCE LA5U	211EUTW	SWSWS30T12SR08E	05/06/1975	210	57	1.50	--
C113	USCE AF63	211EUTW	SWSWS03T12SR08E	01/20/1976	230	54	2	--
D032	USCE GW92	110ALVM	NESWS06T12SR09E	06/11/1975	266.70	20	1.50	--
D033	USCE GW93A	211GORD	SWNSWS06T12SR09E	05/15/1975	259.20	178	1.50	--
D034	USCE GW93B	211EUTW	SWNSWS06T12SR09E	05/15/1975	259.40	102	1.50	--
D035	USCE GW93C	110ALVM	SWNSWS06T12SR09E	05/15/1975	259.40	20	1.50	--
D036	USCE GW94A	110ALVM	NWNWS06T12SR09E	06/26/1975	255	27	1.50	--
G052	USCE APF55	211EUTW	NESWS03T13SR19W	08/05/1975	205.70	69	1.50	--
G053	USCE APF57	211EUTW	SEWSWS34T12SR19W	07/22/1975	207.30	50	1.50	--
G054	USCE GW73	110ALVM	SESES27T13SR07E	05/23/1975	198	32	1.50	--
G055	USCE GW74	110ALVM	SWNWS36T13SR19W	05/26/1975	214.30	32	1.50	--
G056	USCE GW76	110ALVM	NWNES10T13SR19W	06/02/1975	203.40	45	1.50	--
G057	USCE GW76A	110ALVM	NWSWS15T13SR07E	06/18/1975	202.40	25	1.50	--
G058	USCE GW77	110ALVM	NENES11T13SR19W	05/31/1975	234.20	46	1.50	--
G059	USCE GW78	110ALVM	NENWS03T13SR07E	05/20/1975	205.30	36	1.50	--
G060	USCE GW75	110ALVM	NWSWS23T13SR19W	05/21/1975	200	30	2	--
H018	USCE TTM5B	110ALVM	SESES22T13SR19W	05/08/1975	200	26	6	--
L062	USCE 105A	211EUTW	SWSWS19T14SR19W	08/11/1972	210	64	4	--
L063	USCE 101A	211EUTW	SWSWS15T14SR07E	08/09/1972	202	90	4	--
L064	USCE 102A	211EUTW	NWNWS23T14SR07E	08/04/1972	191	50	4	--
L065	USCE 104A	211EUTW	SESES10T14SR19W	08/14/1972	194	55	4	--
L067	USCE 104B	110ALVM	SESES10T14SR19E	08/15/1972	194	24	4	--
L068	USCE 102B	110ALVM	NWNWS23T14SR07E	08/07/1972	191	30	4	--
L069	USCE 101B	110TRCS	SWSWS15T14SR07E	08/09/1972	202	20	4	--
L075	USCE AB11	211MCSN	SWSWS26T14SR07E	12/11/1976	200	224	4	--
L077	USCE AB10	211EUTW	SWSWS26T14SR07E	12/15/1976	200	145	4	--
L078	USCE AB12	211EUTW	SWSWS26T14SR07E	12/17/1976	200	90	4	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
MONROE COUNTY--Continued								
L084	USCE AB1	211EUTW	NWSWS26T14SR07E	10/28/1976	195	80	1.50	--
L085	USCE AB2	211EUTW	NWSWS26T14SR07E	10/28/1976	195	146	1.50	--
L086	USCE AB2A	211EUTW	NWSWS26T14SR07E	11/06/1976	195	119	1.50	--
L087	USCE AB5	211EUTW	NESES10T14SR19W	10/14/1976	192	150	1.50	--
L088	USCE AB6	211EUTW	NWSWS26T14SR07E	11/07/1976	190	70	1.50	--
L089	USCE AB7	211EUTW	NWSWS26T14SR07E	11/07/1976	187.40	133	1.50	--
L090	USCE GW70	110ALVM	SWSWS14T14SR07E	05/28/1975	193.30	26	1.50	--
L091	USCE GW70A	110ALVM	NNWNS23T14SR19W	06/17/1980	193	27	1.50	--
L092	USCE GW71	110ALVM	NENWS12T14SR19W	05/15/1975	225.40	32	1.50	--
L093	USCE GW72	110ALVM	SESES01T14SR19W	05/19/1975	220.80	30	1.50	--
L095	USCE P1	211EUTW	NENWS35T14SR19W	10/05/1982	190	38	1.50	--
L096	USCE P2	211EUTW	NENWS35T14SR19W	10/01/1982	190	42	1.50	--
PRENTISS COUNTY								
D028	USCE MW1-2	211EUTW	NWNES33T04SR09E	08/18/1977	510	158	1.50	--
D030	USCE MW1-4	211GORD	NENES33T04SR09E	09/04/1978	510	285	1.50	--
D032	USCE MW2-2	211GORD	NESES31T04SR09E	03/18/1980	440	220	1.50	--
D033	USCE MW2-3	211EUTW	NESES31T04SR09E	03/25/1980	440	181	1.50	--
D036	USCE W1-1	211GORD	SWNWS08T04SR09E	07/07/1980	580	371	1.50	--
D037	USCE W1-2	211EUTW	SWNWS08T04SR09E	07/07/1980	580	280	1.50	--
D039	USCE W3-1	211GORD	SESES15T04SR09E	12/04/1980	500	215	1.50	--
D040	USCE W3-2	211EUTW	SESES15T04SR09E	12/10/1980	500	180	1.50	--
H026	USCE SW2-3	211GORD	SWSES10T05SR09E	12/13/1977	480	217	1.50	--
H028	USCE SW3-2	211GORD	SWNWS16T05SR09E	02/04/1980	450	192	1.50	--
H029	USCE SW3-3	211EUTW	SWNWS16T05SR09E	07/02/1980	450	132	1.50	--
H031	USCE SW2-4	211MCSN	SWSES10T05SR09E	01/01/1977	480	133	1.50	--
H033	USCE W6-2	211GORD	SESES10T05SR09E	03/04/1982	480	162	1.50	--
M016	USCE 53A	211GORD	NWSES10T07SR09E	05/--/1972	332	35	4	3.0
M017	USCE 43C	211EUTWR	NWNWS27T06SR09E	05/--/1972	445	90	4	--
M018	USCE 43B	211MCSN	NWNWS27T06SR09E	05/--/1972	460	120	4	--
M019	USCE 52A	211GORD	NESES09T07SR09E	05/--/1972	324	40	4	20
M020	USCE 51A	211GORD	SENWS09T07SR09E	05/--/1972	356	64	4	6.0
M021	USCE 41A	211GORD	SENWS28T06SR09E	05/--/1972	480	226	4	--
M022	USCE 41B	211EUTW	SENWS28T06SR09E	05/--/1972	480	176	4	16
M023	USCE 43A	211GORD	NWNWS27T06SR09E	05/--/1972	460	170	4	--
M025	USCE 43D	211EUTWR	NWNWS27T06SR09E	05/--/1975	460	118	4	--
M026	USCE 42A	211EUTW	NENES28T06SR09E	05/--/1975	420	69	4	--
M027	USCE 42B	211EUTW	NENES28T06SR09E	05/--/1975	420	49	4	--
M028	USCE GW123A	110TRCS	NWNWS16T07SR09E	01/01/1980	316	23	2	--
M030	USCE GW122	110ALVM	SWSES07T07SR09E	02/21/1975	330	23	2	--
M031	USCE GW123	110ALVM	SESES15T07SR09E	07/15/1975	354	22	2	--
M032	USCE GW124	110ALVM	SENWS09T07SR09E	07/18/1975	350	39	2	--
TISHMINGO COUNTY								
A017	USCE 10DP177	211GORD	NENWS36T02SR09E	05/14/1973	433.40	48	4	--
A019	USCE 2MW16	211EUTW	NWSES35T02SR09E	--/--/1981	500	108	1.50	--
A020	USCE 2MW17	211GORD	NWSES35T02SR09E	--/--/1981	500	119	1.50	--
D037	USCE 14A	211GORD	SENWS36T03SR09E	03/06/1972	545	184	2	--
D040	USCE 12A	211GORD	SENES34T03SR09E	03/09/1972	485	190	8	--
D041	USCE 12B	211EUTWR	SENES34T03SR09E	03/17/1972	485	150	8	60
D042	USCE 12C	211EUTWR	SENES34T03SR09E	03/21/1972	485	88	6	58
D044	USCE 14C	211EUTW	SENWS36T03SR09E	02/29/1972	545	106	4	--
D047	USCE 1DP141	211EUTWR	SENWS35T03SR09E	05/--/1972	464.50	134	3	2.0
D048	USCE 1DP142	211EUTWR	SENWS35T03SR09E	05/--/1972	462	57	1.50	--
D050	USCE 11C	211GORD	SWSES33T03SR09E	10/21/1975	505	404	6	--
D051	USCE 11D	211EUTW	SWSES33T03SR09E	10/21/1976	505	210	6	--
D055	USCE 3DP151	211GORD	NESES14T03SR09E	08/30/1972	453.30	163	3	--
D056	USCE 3DP152	211EUTW	NESES14T03SR09E	09/11/1972	451.40	100	3	--
D059	USCE 7DP167	211GORD	NESES01T03SR09E	03/12/1973	447	88	3	--
D060	USCE 7DP168	211EUTW	NESES01T03SR09E	03/13/1973	446.60	43	4	--
D064	USCE W2-3	211GORD	SWWS11T03SR09E	11/03/1980	480	172	1.50	--
D065	USCE W2-4	211EUTW	SWWS11T03SR09E	11/06/1980	479	104	1.50	--
D067	USCE 2MW6	211GORD	SWWS01T03SR09E	--/--/1981	455	90	1.50	--
D068	USCE 2MW7	211EUTW	SWSES02T03SR09E	--/--/1981	475	110	1.50	--

DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAMETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
TISHOMINGO COUNTY--Continued								
D069	USCE 2MW8	211GORD	SWSES02T03SR09E	--/--/1981	475	131	1.50	--
E014	USCE 15A	211GORD	NWSWS31T03SR10E	02/15/1972	540	340	2	20
E015	USCE 15B	211GORD	NWSWS31T03SR10E	02/24/1972	540	204	4	3.0
E016	USCE 15C	211EUTWR	NWSWS31T03SR10E	02/--/1972	540	130	4	3.0
E027	USCE NE2-3	211GORD	SWSWS33T03SR10E	03/07/1970	580	157	1.50	--
E028	USCE NE2-4	211GORD	SWSWS33T03SR10E	03/24/1978	580	340	1.50	--
E033	USCE NE3-4	211GORD	SESES26T03SR10E	11/21/1979	585	135	1.50	--
E034	USCE NE3-5	211EUTW	SESES26T03SR10E	11/27/1979	585	63	1.50	--
E040	USCE E2-1	211GORD	SESES20T03SR10E	03/08/1983	550.40	156	1.50	--
E041	USCE E2-2	211EUTW	SESES20T03SR10E	03/08/1983	550.20	107	1.50	--
E042	USCE 2MW9	211EUTW	SENWS06T03SR10E	--/--/1981	450	36	1.50	--
E043	USCE 2MW10	211EUTW	SENWS06T03SR10E	--/--/1973	450	42	3	--
E044	USCE 2MW13	211EUTW	NWSWS36T02SR09E	--/--/1981	472	88	1.50	--
E045	USCE 2MW14	211GORD	NWSWS36T02SR09E	--/--/1981	472	99	1.50	--
G004	USCE 21A	211GORD	SWSWS26T04SR09E	05/24/1971	585	278	4	3.0
G005	USCE 21B	211EUTWL	SWSWS26T04SR09E	05/--/1971	585	235	4	11
G013	USCE 35A	211GORD	NESWS33T04SR10E	07/--/1971	600	300	4	6.0
G014	USCE 35B	211EUTWR	NESWS33T04SR10E	07/22/1971	600	203	4	5.0
G015	USCE 25A	211GORD	NWSWS20T04SR10E	07/28/1971	610	235	4	--
G016	USCE 25B	211EUTWR	NWSWS20T04SR10E	08/03/1971	610	200	4	30
G017	USCE 26A	211GORD	NESES20T04SR10E	07/28/1971	565	250	2	--
G018	USCE 26B	211EUTWR	NESES20T04SR10E	07/--/1971	565	127	4	--
G019	USCE 26C	211EUTWR	NESES20T04SR10E	07/--/1971	565	72	2	5.0
G020	USCE 23C	211GORD	NWNWS30T04SR10E	08/25/1971	588	330	2	--
G023	USCE 23G	211GORD	NWNWS30T04SR10E	09/15/1971	601.3	260	2	--
G027	USCE 23I	330MSSP	NWNWS30T04SR10E	10/07/1971	587	492	2	--
G031	USCE 23J	211GORD	NWNWS30T04SR10E	12/02/1971	587	380	4	60
G032	USCE 23L	211EUTWR	NWNWS30T04SR10E	12/08/1971	563	126	8	60
G033	USCE 23D	211EUTWR	NWNWS30T04SR10E	08/31/1971	590	145	4	20
G034	USCE 23E	211EUTWR	NWNWS30T04SR10E	09/30/1971	585	92	2	--
G038	USCE 22A	211GORD	SWNWS25T04SR09E	01/31/1972	625	360	4	--
G040	USCE 22B	211EUTWR	SWNWS25T04SR09E	02/04/1972	625	240	4	--
G041	USCE 23N	211MCSN	NWNWS30T04SR10E	01/24/1972	600	200	4	20
G042	USCE 230	211EUTW	NWNWS30T04SR10E	02/01/1972	561	60	6	9.0
G079	USCE 6DP163	211GORD	SESES24T04SR09E	02/20/1973	573	222	4	--
G080	USCE 6DP164	211EUTW	SESES24T04SR09E	02/23/1973	572.60	125	4	--
G083	USCE NE1-1	211GORD	NENWS05T04SR10E	10/17/1977	500	190	3	--
G085	USCE NE1-3	211EUTW	NENWS05T04SR10E	06/22/1978	495	65	3	--
G086	USCE ME1-1	211GORD	NENES21T04SR10E	02/08/1979	560	204	1.50	--
G087	USCE ME1-2	211EUTWL	NENES21T04SR10E	02/13/1979	560	129	1.50	--
G092	USCE ME2-1	211GORD	NWSWS14T04SR10E	02/16/1979	560	162	1.50	--
G093	USCE ME2-2	211EUTW	NWSWS14T04SR10E	02/16/1979	560	67	1.50	--
G095	USCE ME3-2	211GORD	SWNES13T04SR10E	08/28/1979	517	93	1.50	--
G100	USCE SE1-2	211GORD	SWNWS35T04SR10E	06/08/1979	560	218	1.50	--
G102	USCE SE1-4	211EUTW	SWNWS35T04SR10E	04/30/1979	560	73	1.50	--
G104	USCE SE2-2	211GORD	NWSWS25T04SR10E	05/17/1979	580	183	1.50	--
G106	USCE SE2-4	211EUTW	NWSWS25T04SR10E	05/24/1979	580	103	1.50	--
G112	USCE 2DP147	211GORD	SESES11T04SR09E	07/20/1972	504.50	165	3	--
G113	USCE 2DP148	211EUTW	SESES11T04SR09E	07/25/1972	504.70	130	3	--
G116	USCE 4DP156	211GORD	SESES31T04SR10E	01/01/1973	490.10	153	3.50	--
G118	USCE 4DP158	211EUTW	SESES31T04SR10E	10/26/1972	487.70	56	4	--
G121	USCE 9DP173	211GORD	NESES14T04SR09E	04/19/1973	552.20	220	4	--
G122	USCE 9DP174	211EUTW	NESES14T04SR09E	04/23/1973	552.40	163	4	--
J008	USCE 33A	211EUTWL	SENES06T05SR09E	07/--/1971	515	172	4	--
J013	USCE 34A	211GORD	NENWS05T05SR10E	07/--/1971	560	266	4	8.0
J014	USCE 34B	211EUTWR	NENWS05T05SR10E	07/--/1971	560	134	4	8.0
J016	USCE 33B	211EUTWR	SENES06T05SR09E	07/--/1971	515	90	4	--
J017	USCE 33C	211GORD	SENES06T05SR09E	09/01/1971	515	212	2	--
J018	USCE 31A	211GORD	SWSES01T05SR09E	03/15/1972	473	178	4	1.0
J019	USCE 31B	211EUTWR	SWSES01T05SR09E	03/27/1972	473	74	4	--

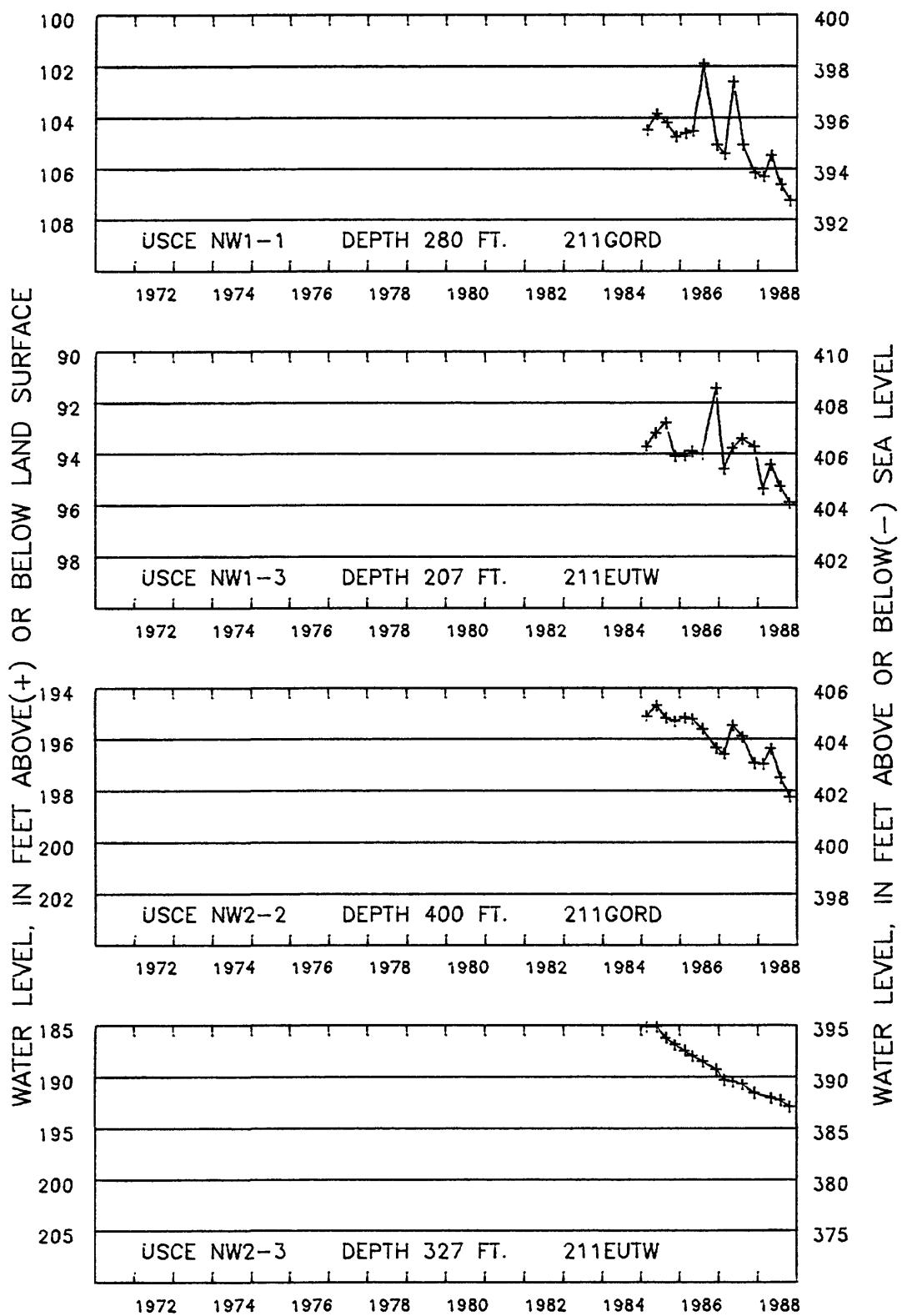
DESCRIPTIONS OF GROUND-WATER WELLS--Continued

LOCAL NUMBER	OWNER	PRINCIPAL AQUIFER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)	DISCHARGE (GALLONS PER MINUTE)
TISHOMINGO COUNTY--Continued								
J020	USCE 32A	211GORD	NWNWS06T05SR10E	04/27/1972	530	240	4	10
J021	USCE 32B	211EUTWR	NWNWS06T05SR10E	04/--/1972	530	112	4	8.0
J066	USCE SW1-2	211EUTW	NWNWS12T05SR09E	09/01/1977	560	150	1.50	--
J075	USCE SW1-1	211GORD	SWNWS12T05SR09E	08/25/1977	560	264	1.50	--
J076	USCE 5DP159	211GORD	NESWS08T05SR10E	11/06/1972	437.20	148	4	--
J077	USCE 5DP160	211EUTW	NESWS08T05SR10E	11/08/1972	436	60	3	--
J080	USCE E1-2	211GORD	SWSES09T05SR10E	02/16/1981	520	131	1.50	--
J081	USCE E1-3	211EUTW	SWSES09T05SR10E	03/16/1981	520	102	1.50	--
L029	USCE 54A	211GORD	SWSWS11T07SR09E	04/28/1972	332	27	4	--
L030	USCE 55A	211GORD	SESES11T07SR09E	05/11/1972	380	50	4	18
L031	USCE 45A	211GORD	NWSWS25T06SR09E	03/29/1972	485	92	4	--
L032	USCE 45B	211MCSN	SWNWS25T06SR09E	03/29/1972	485	76	4	--
L033	USCE 54B	110ALVM	SWSWS11T07SR09E	06/06/1972	332	12	4	0.50
L034	USCE 54C	110ALVM	SWSWS11T07SR09E	05/01/1972	333	13	2	--
L051	USCE GW125	110ALVM	SENES02T07SR09E	07/22/1975	367.10	17	2	--

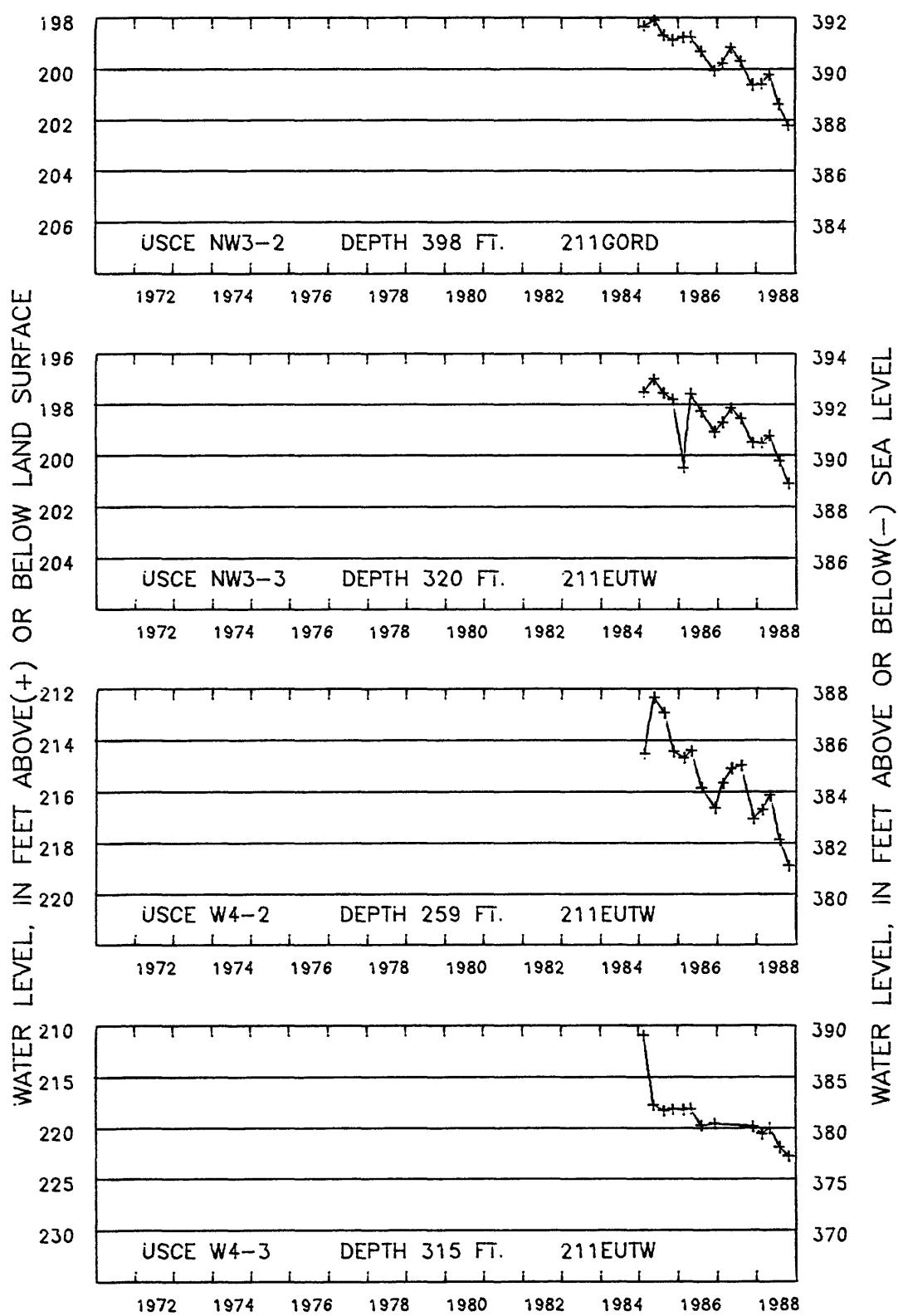
APPENDIX A

GROUND-WATER DATA

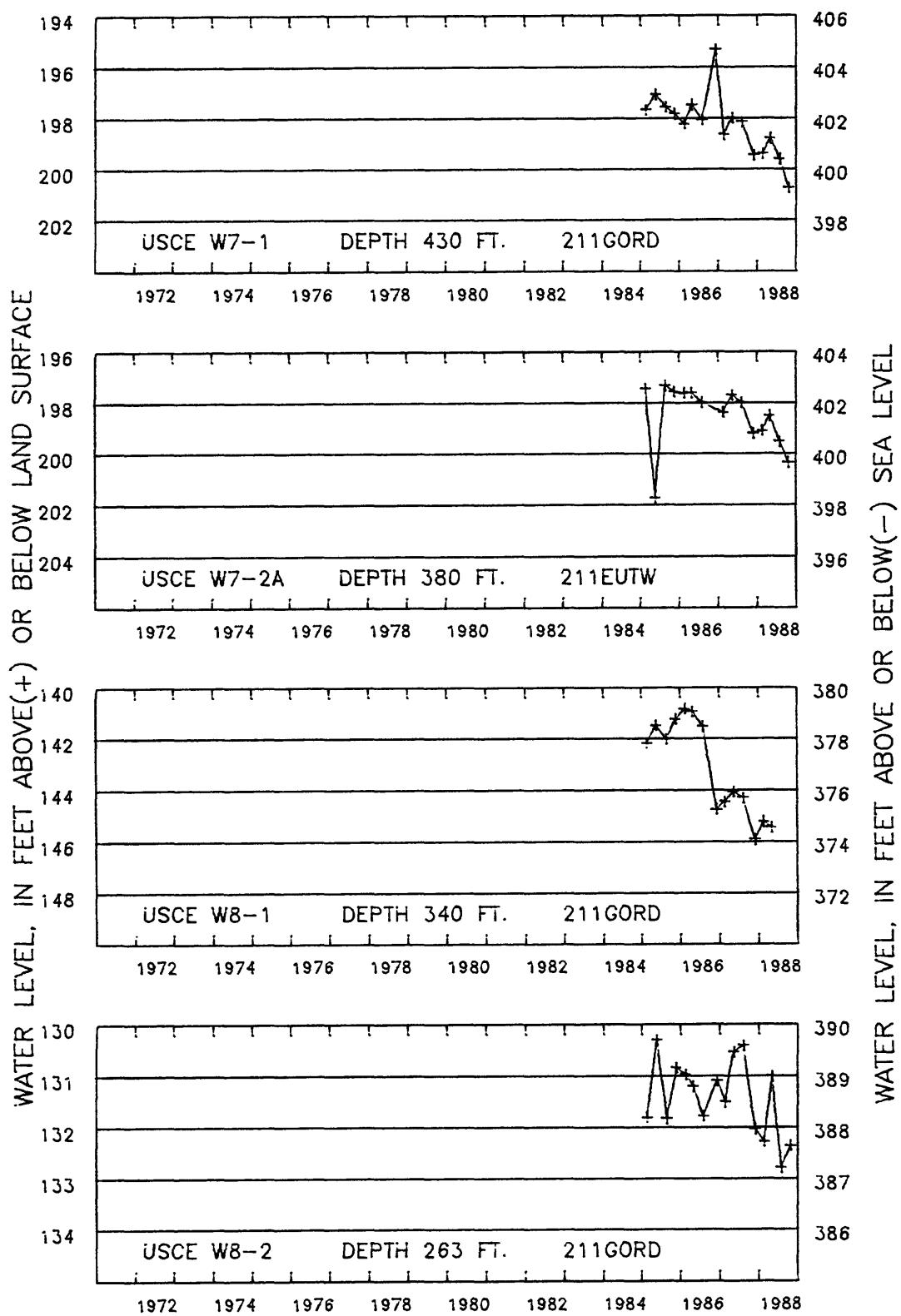
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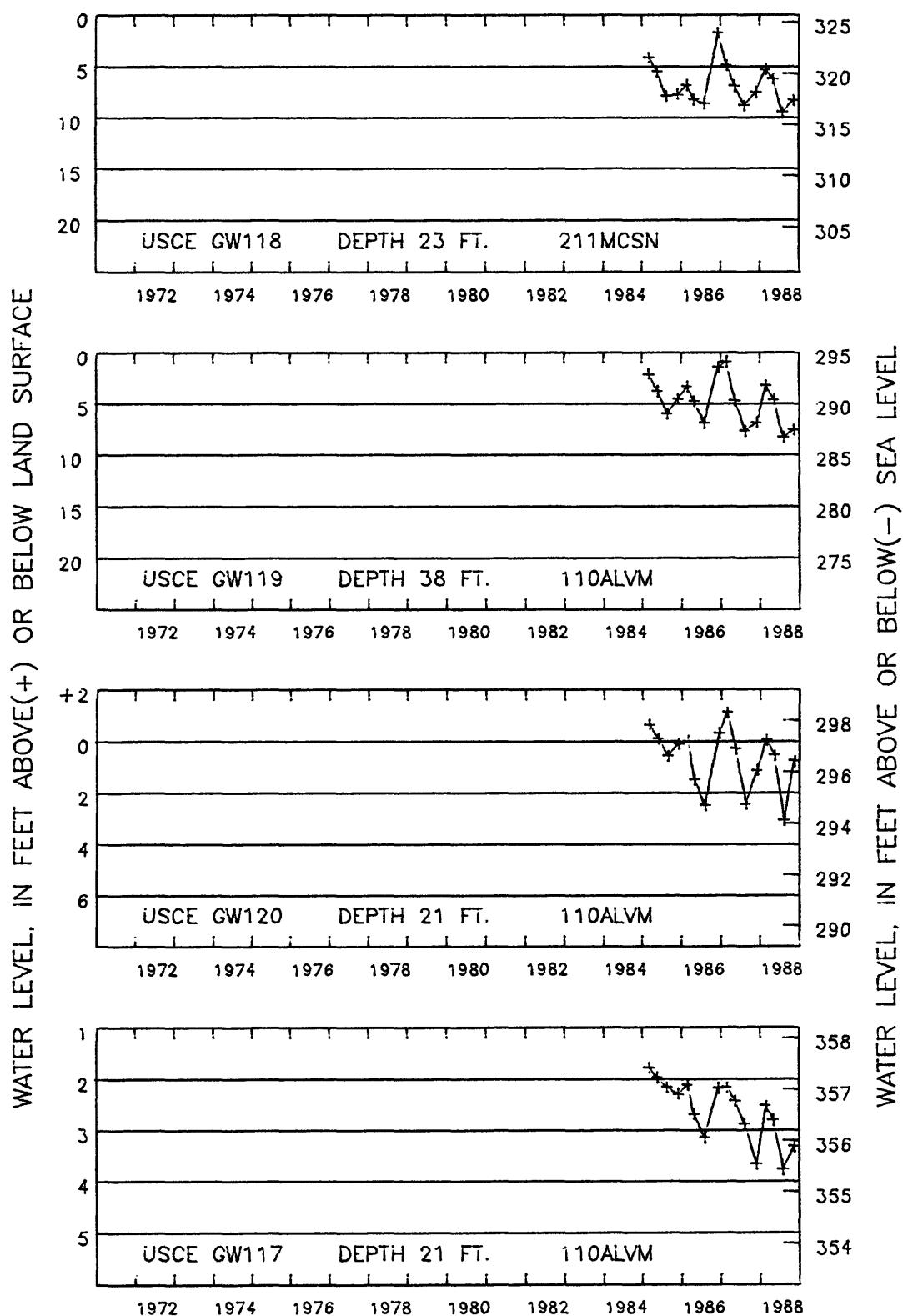
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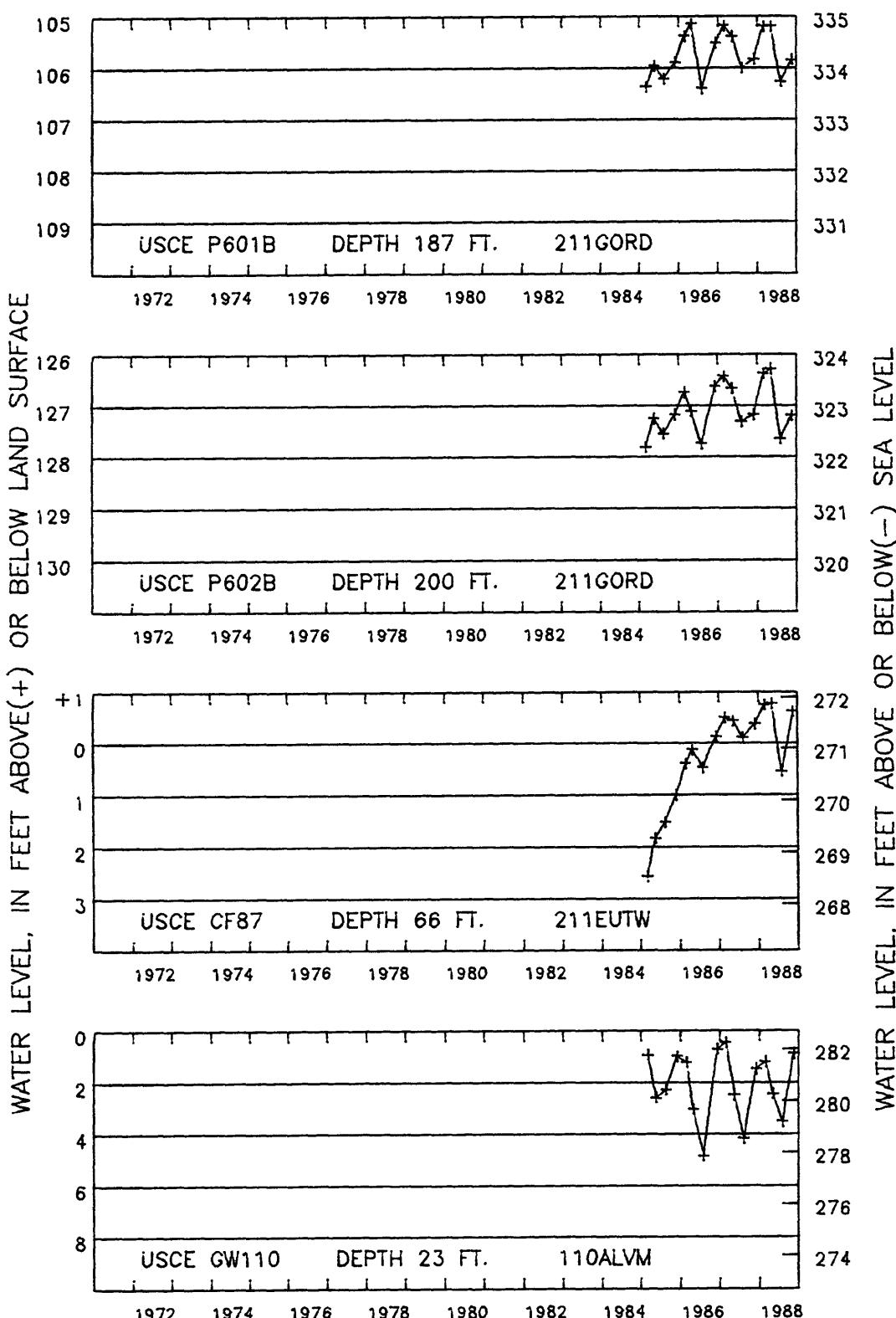
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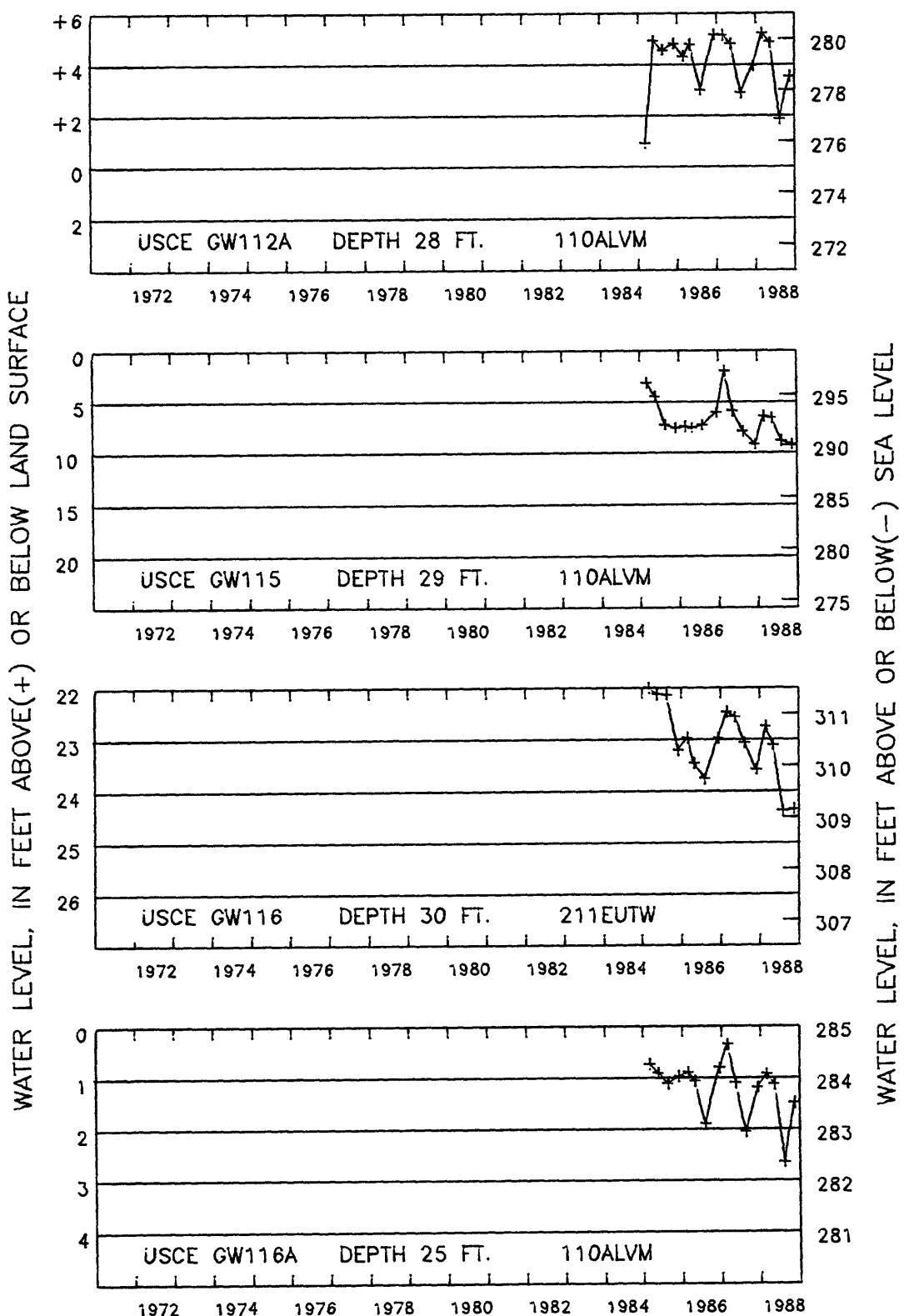
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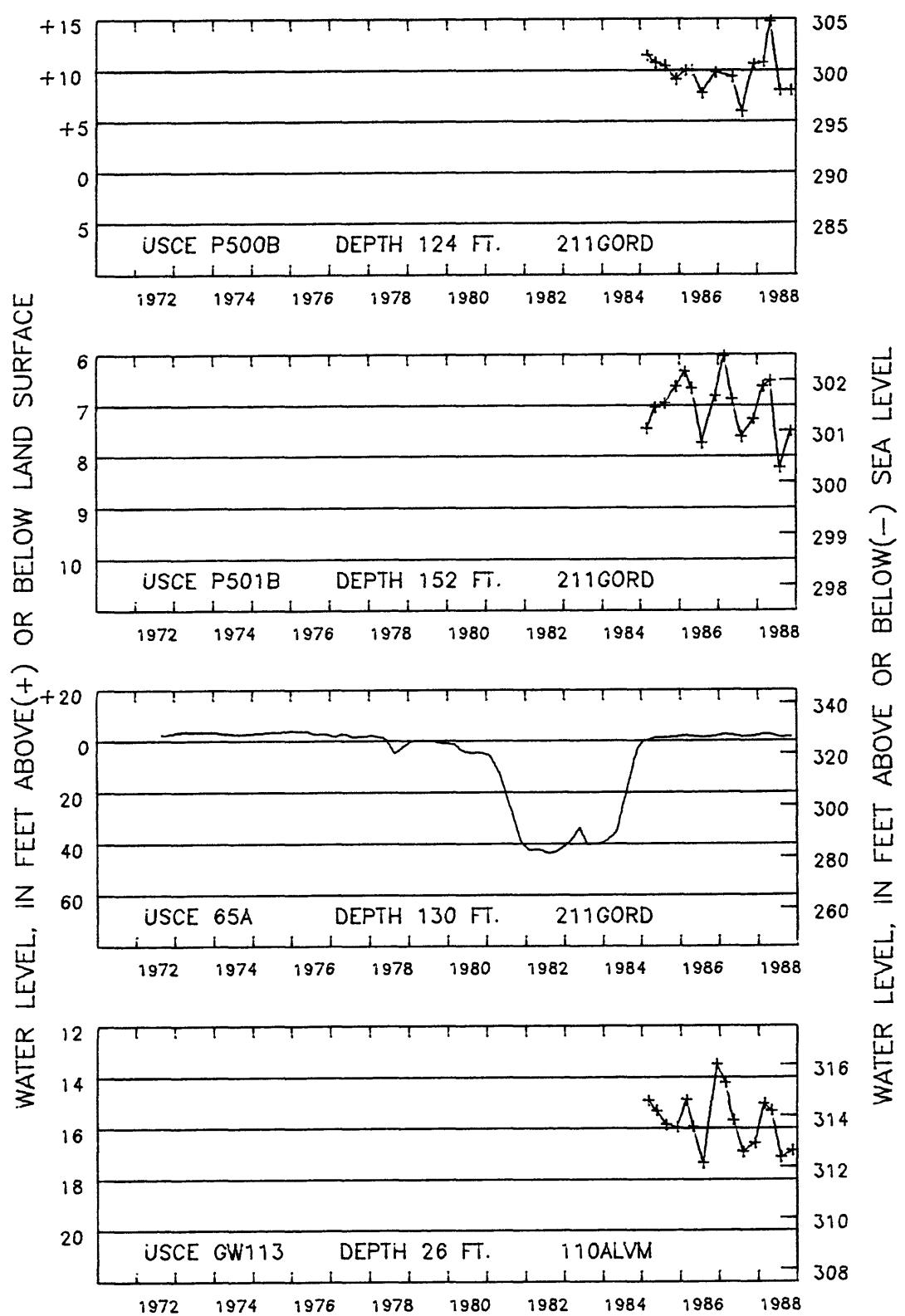
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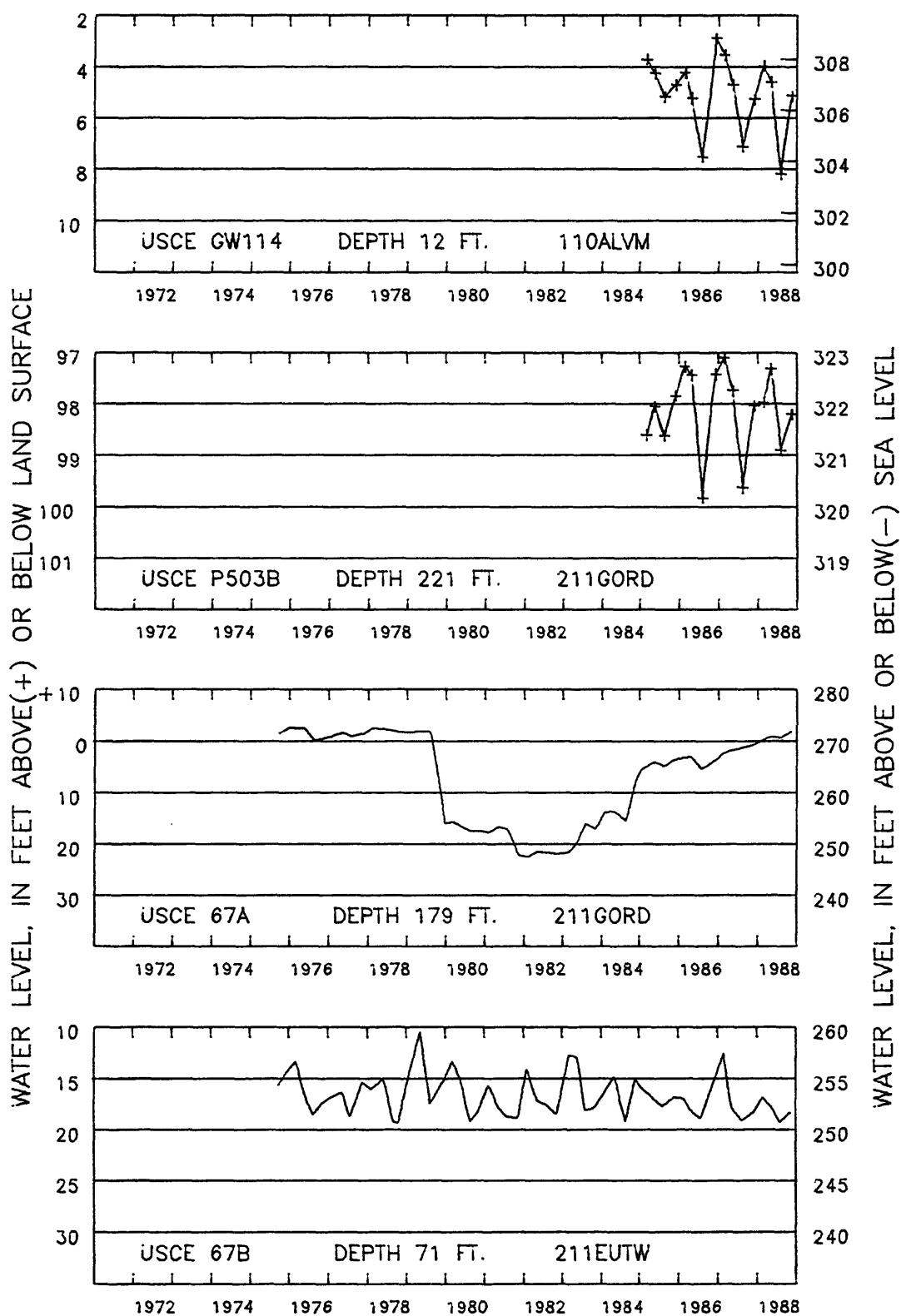
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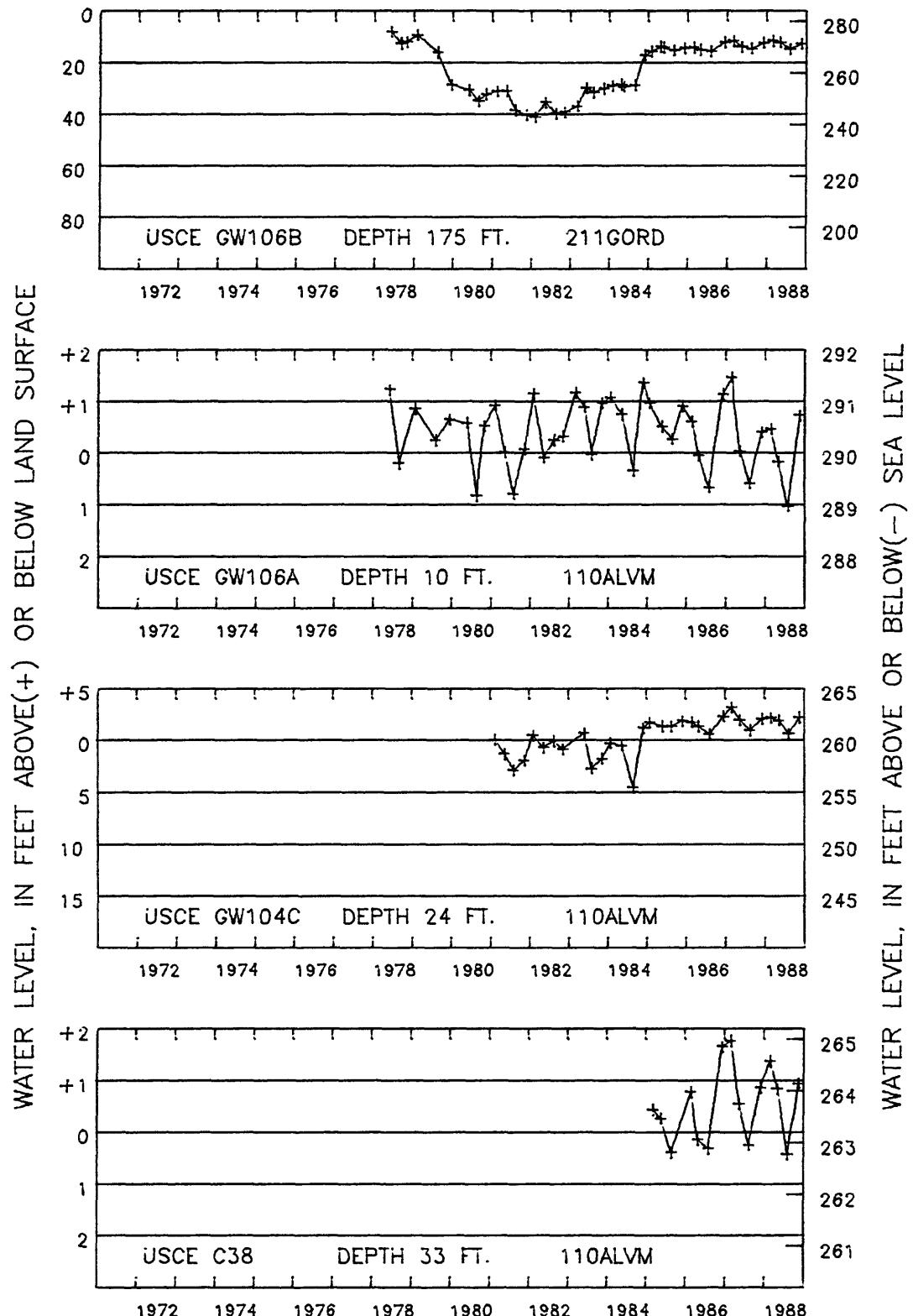
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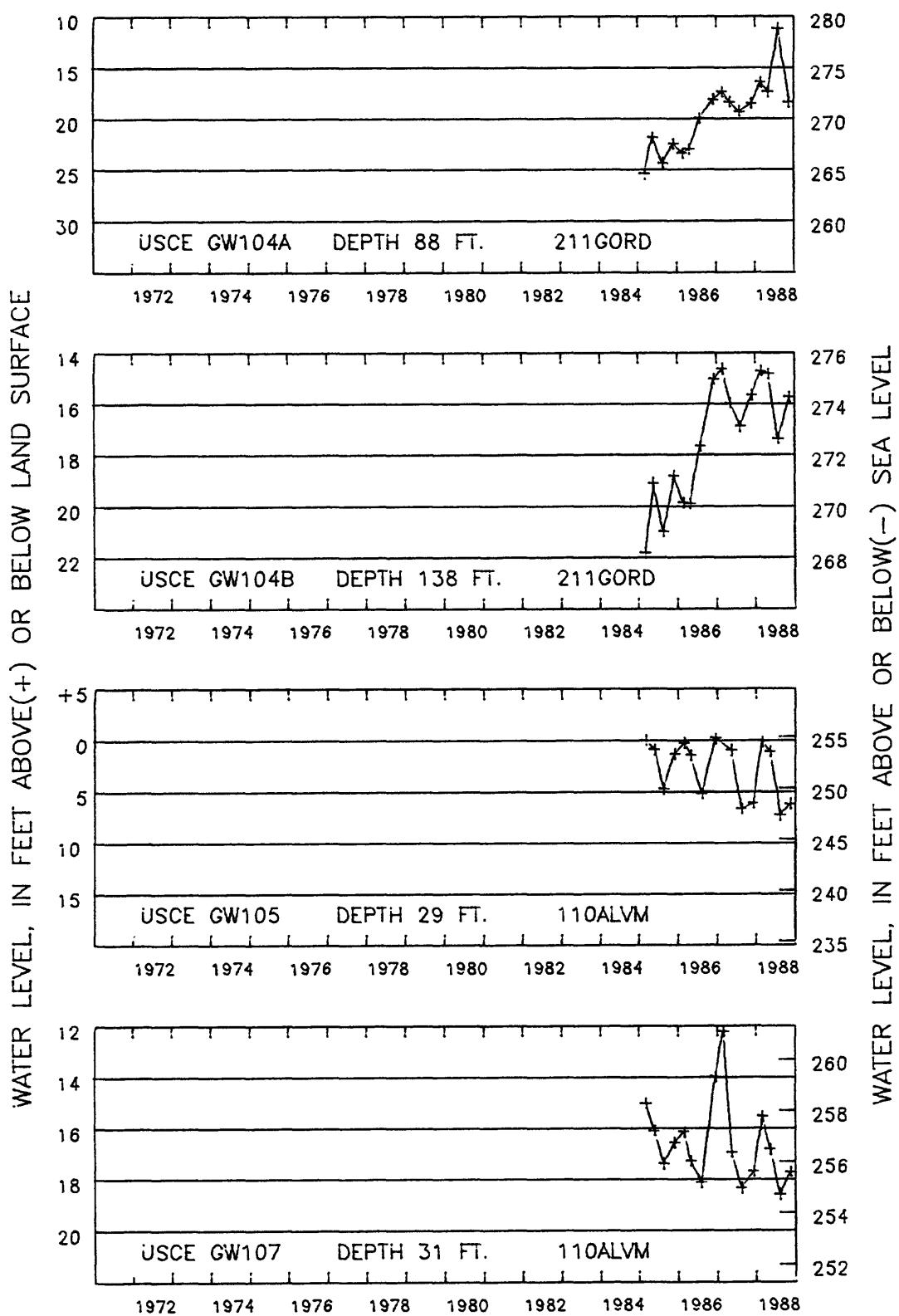
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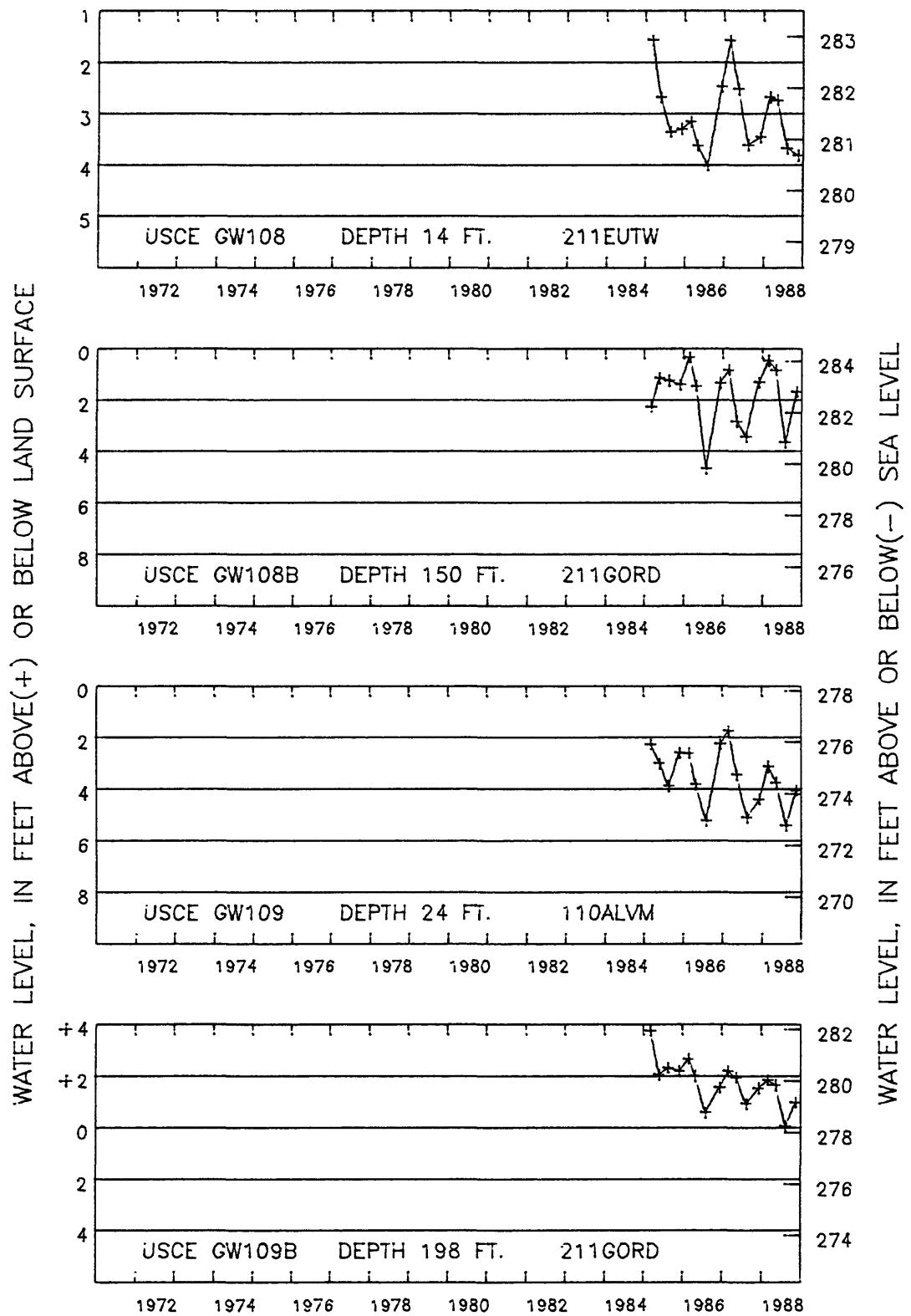
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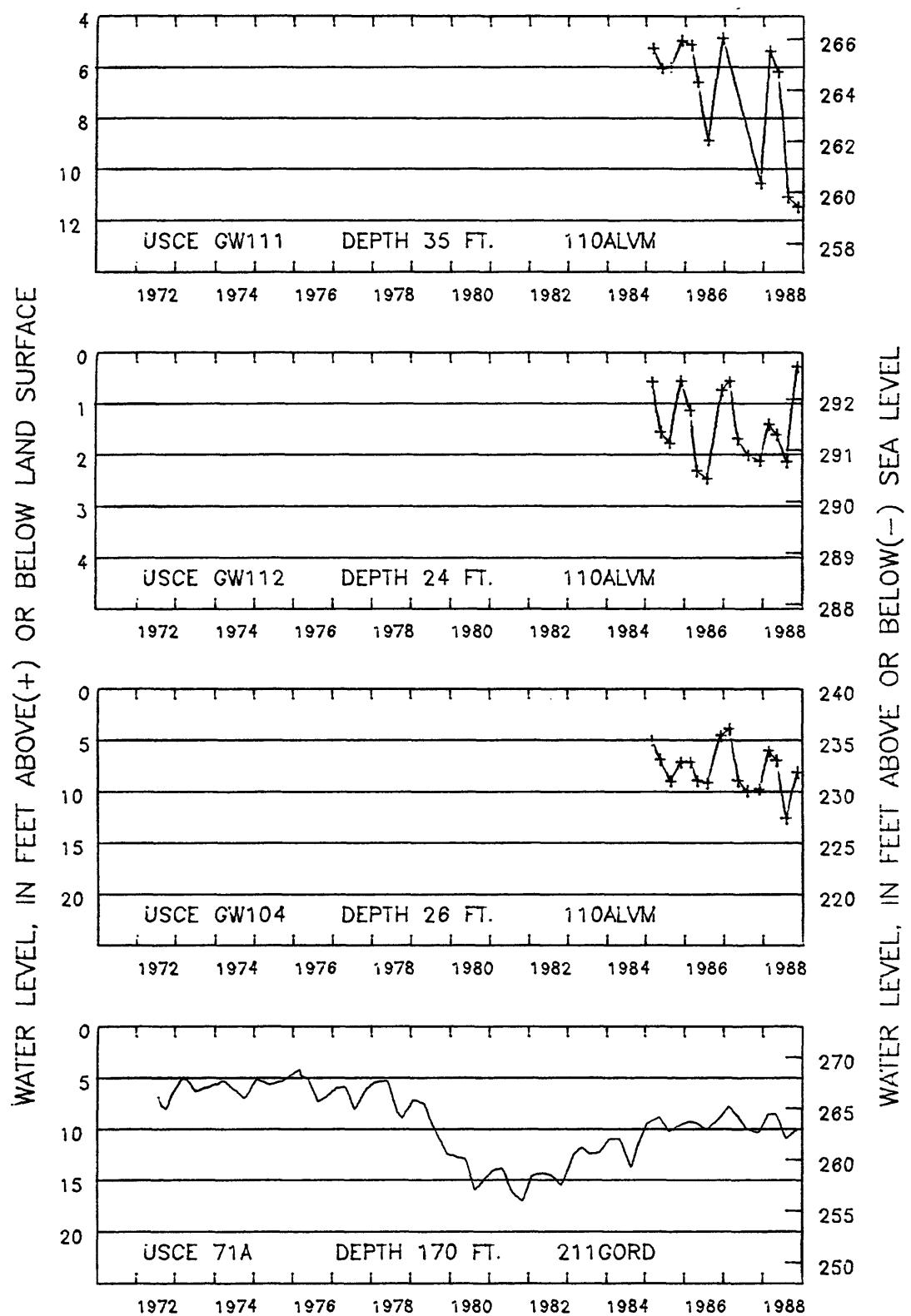
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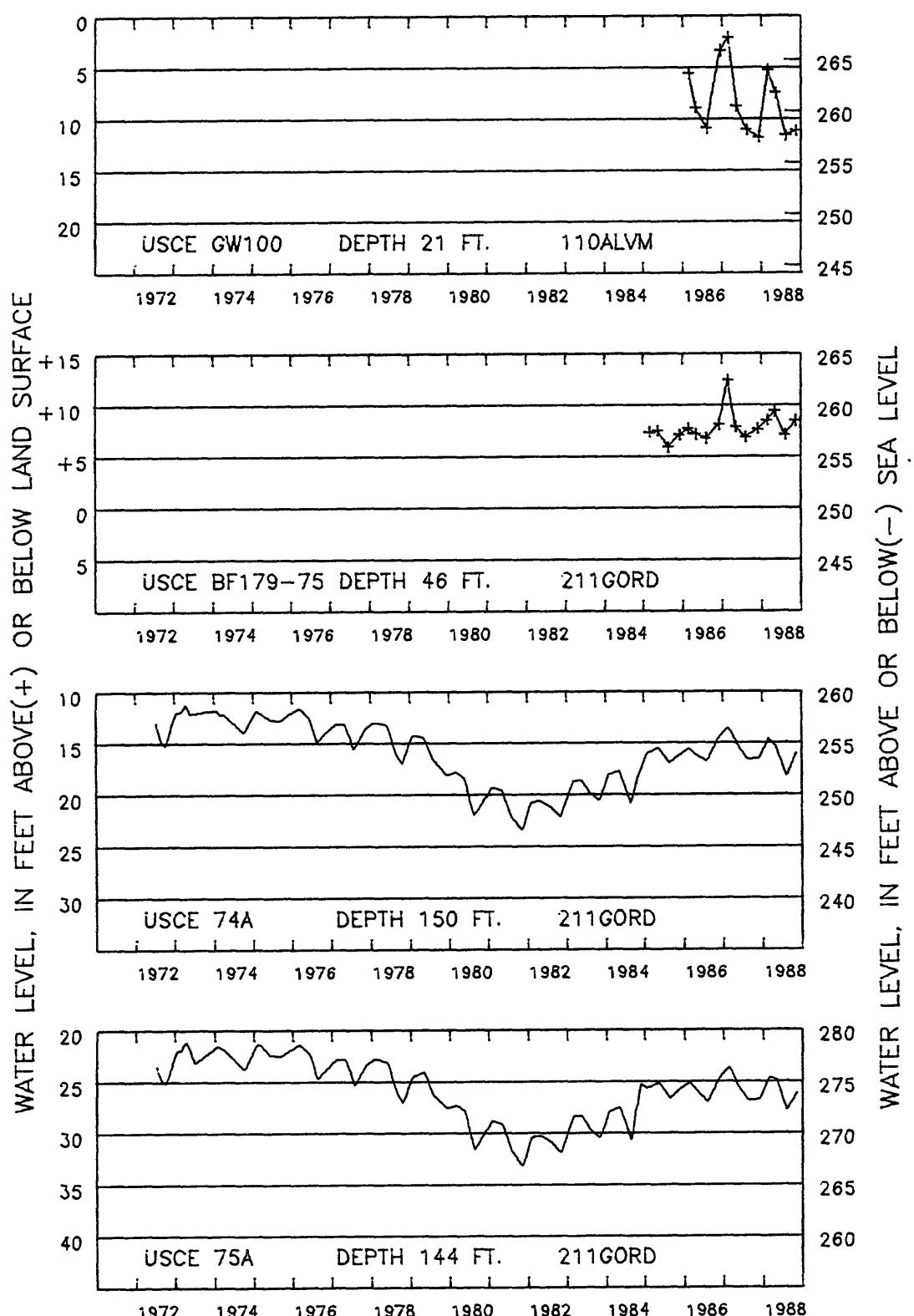
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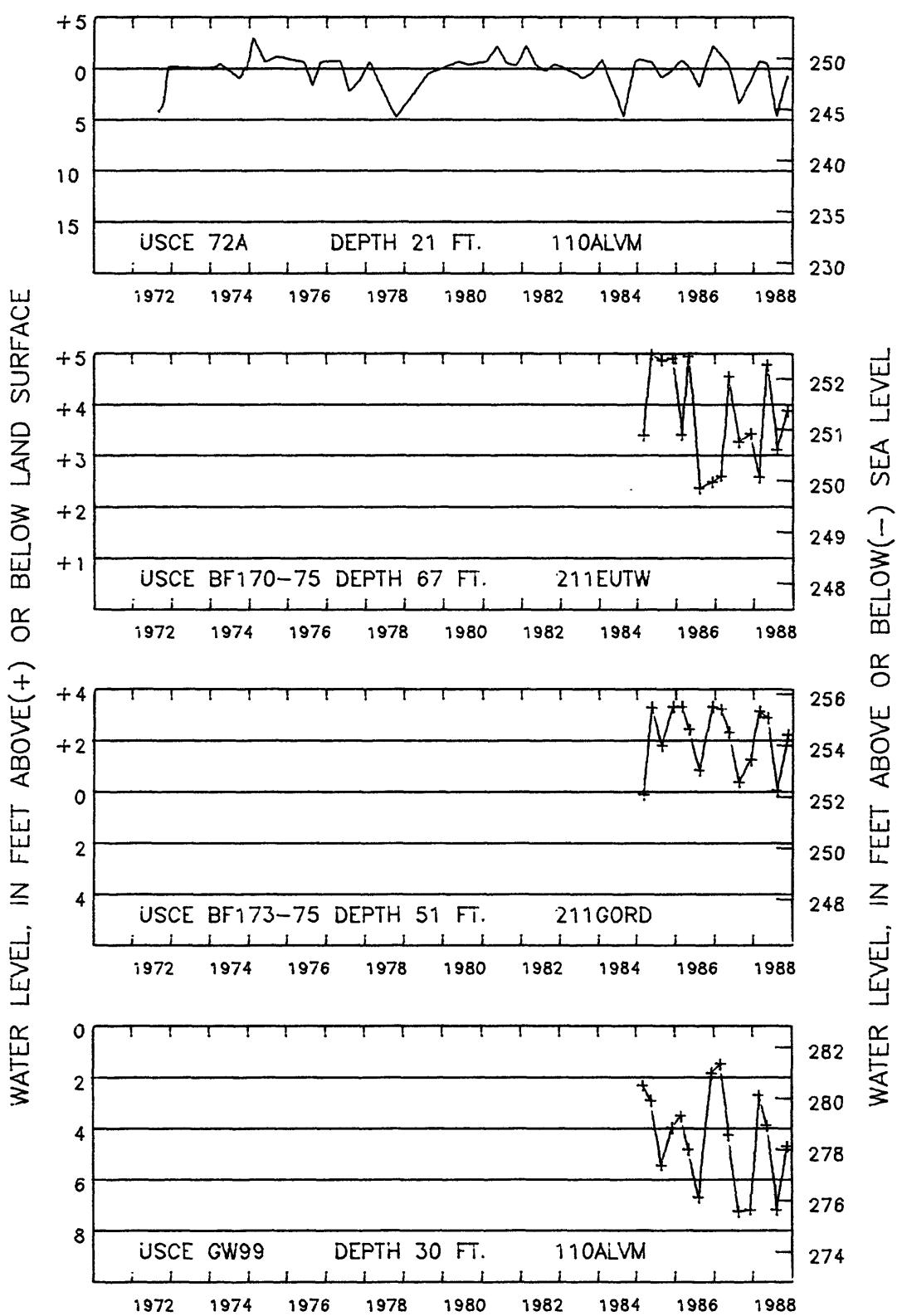
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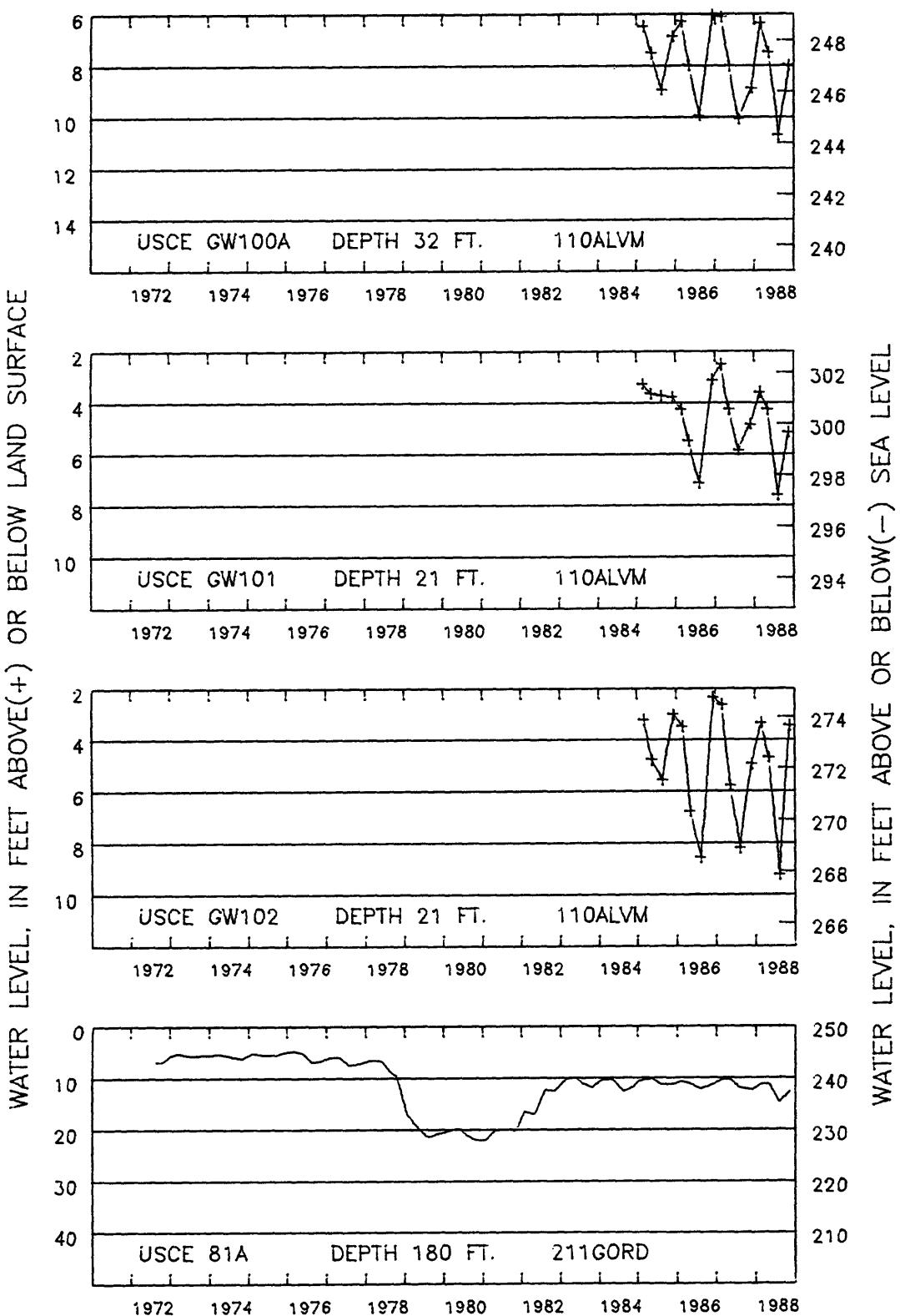
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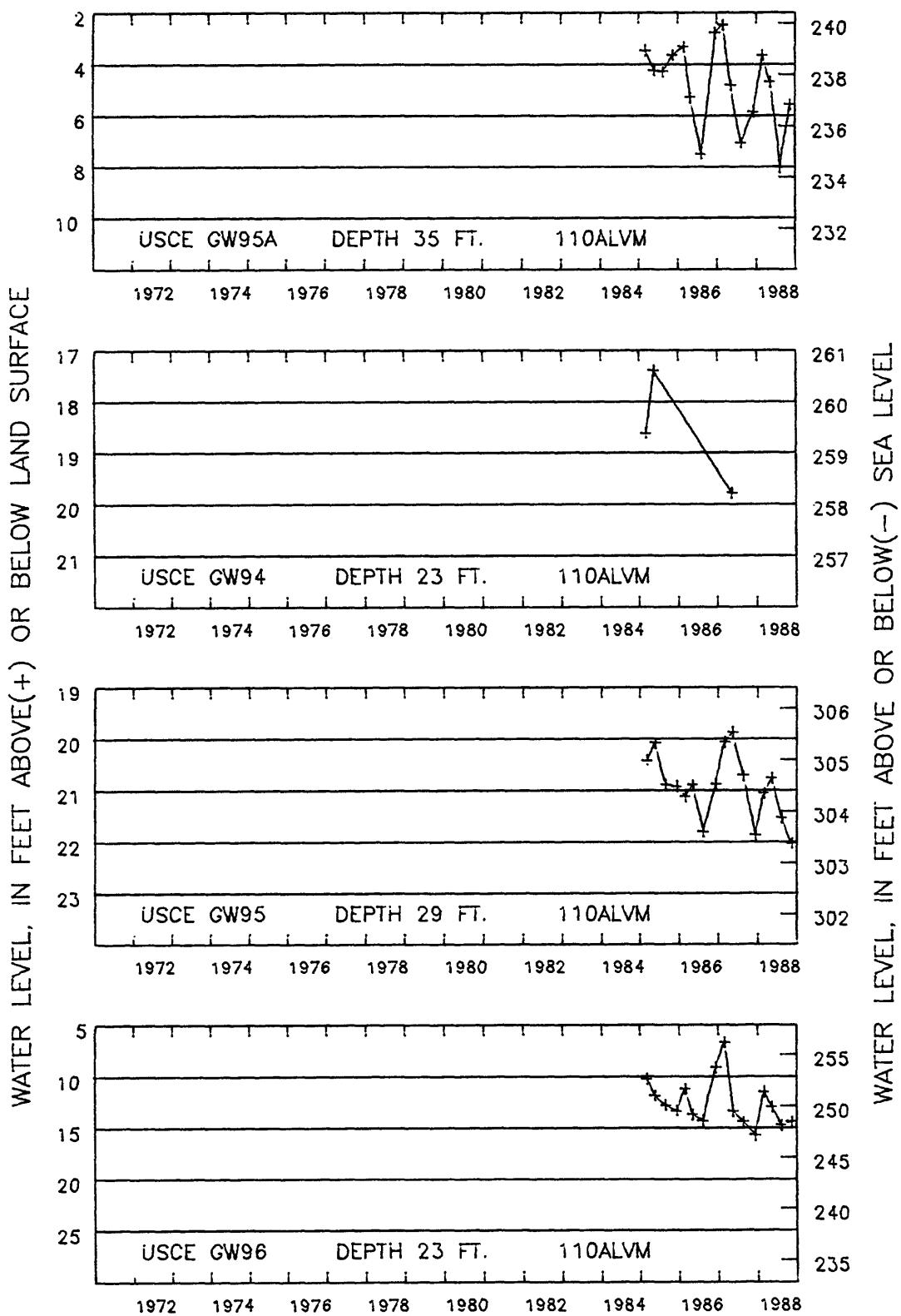
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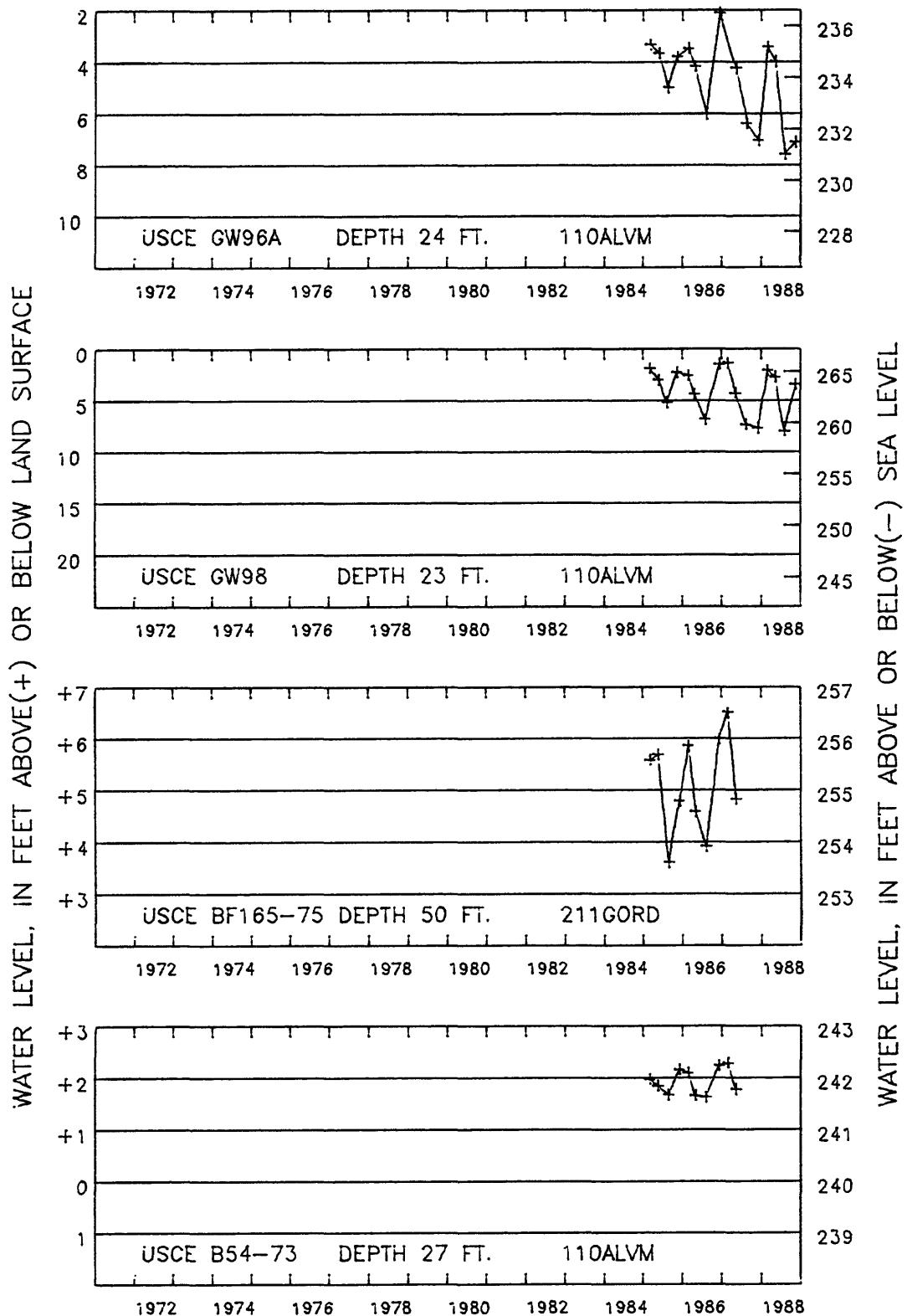
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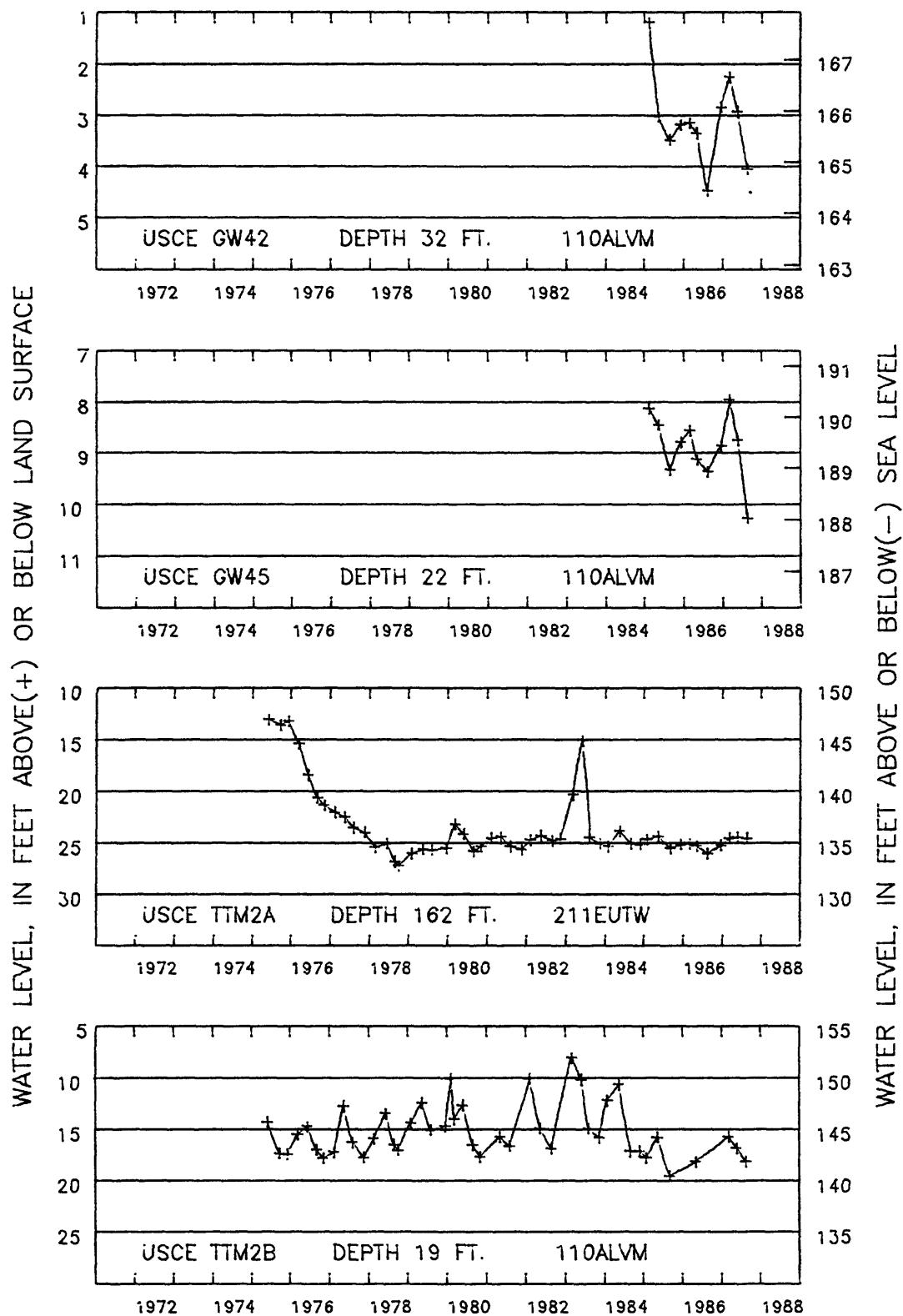
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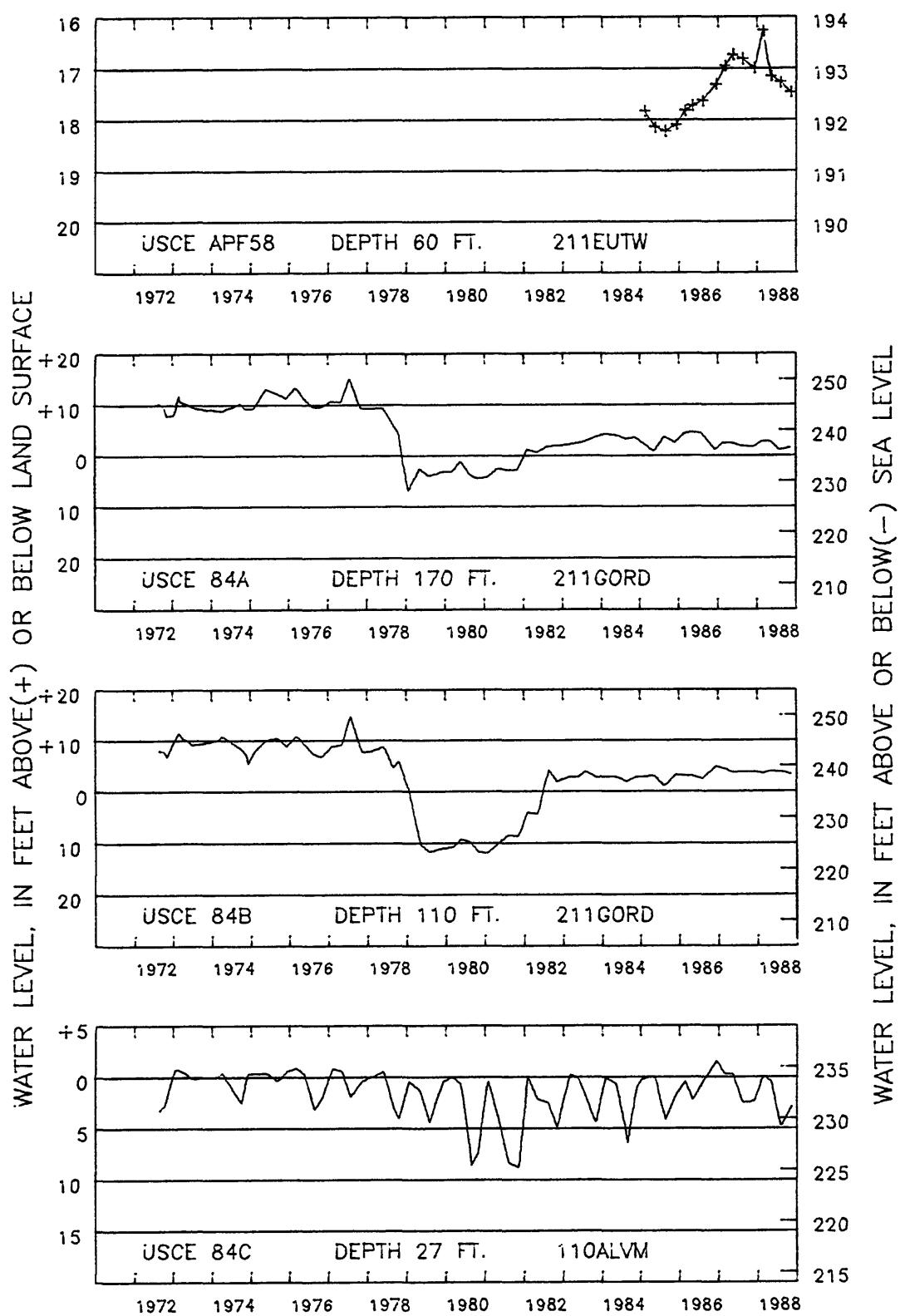
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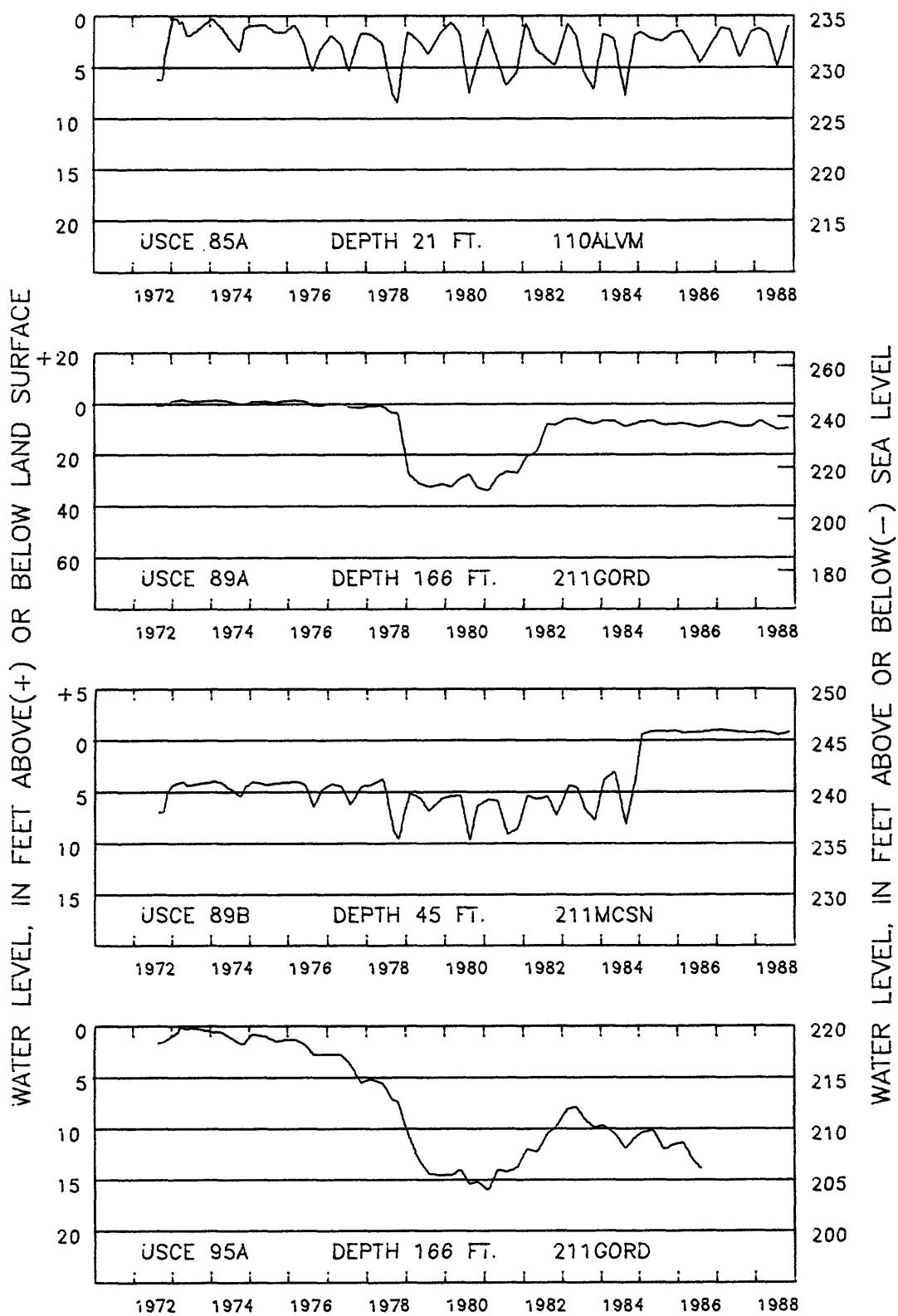
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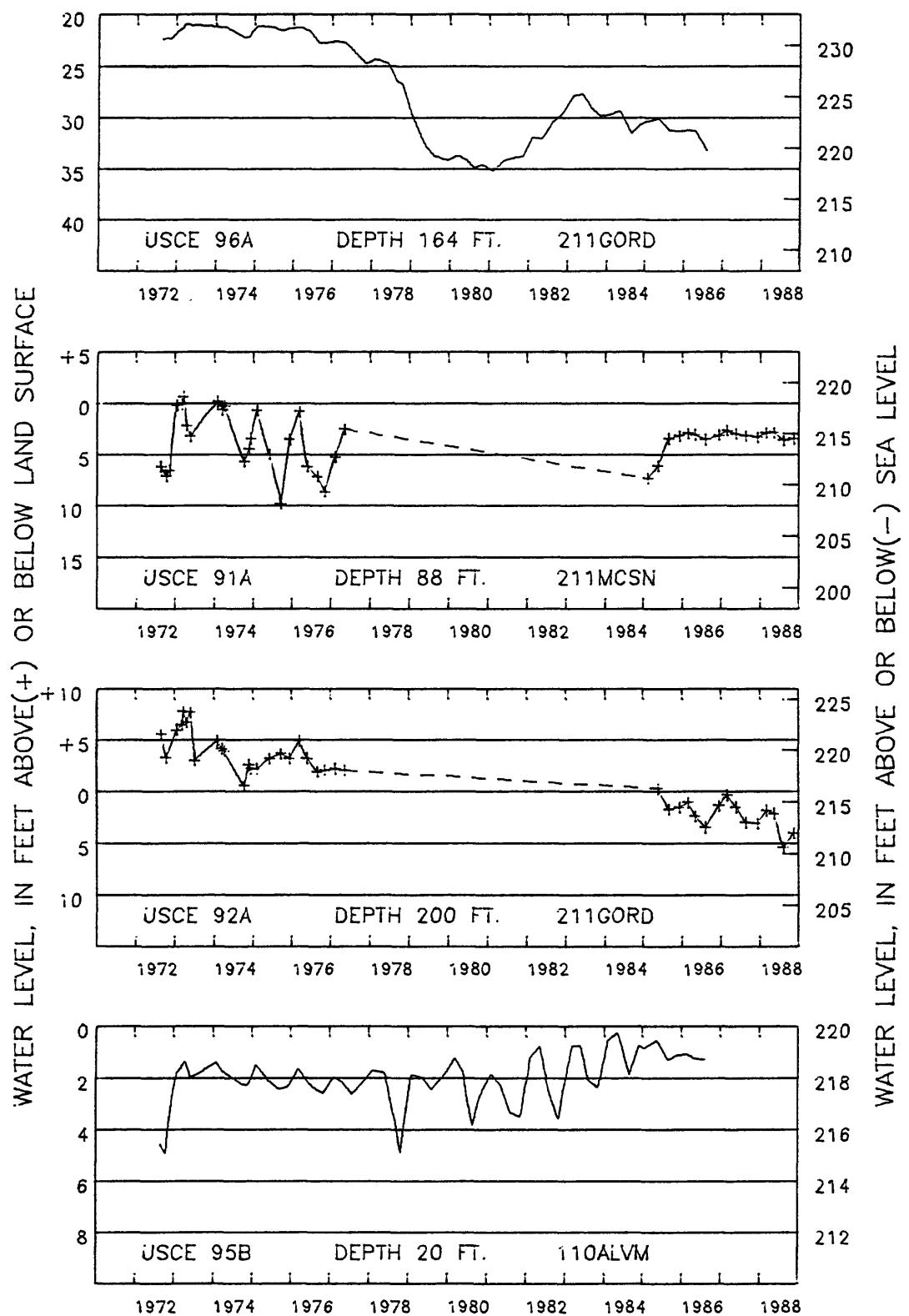
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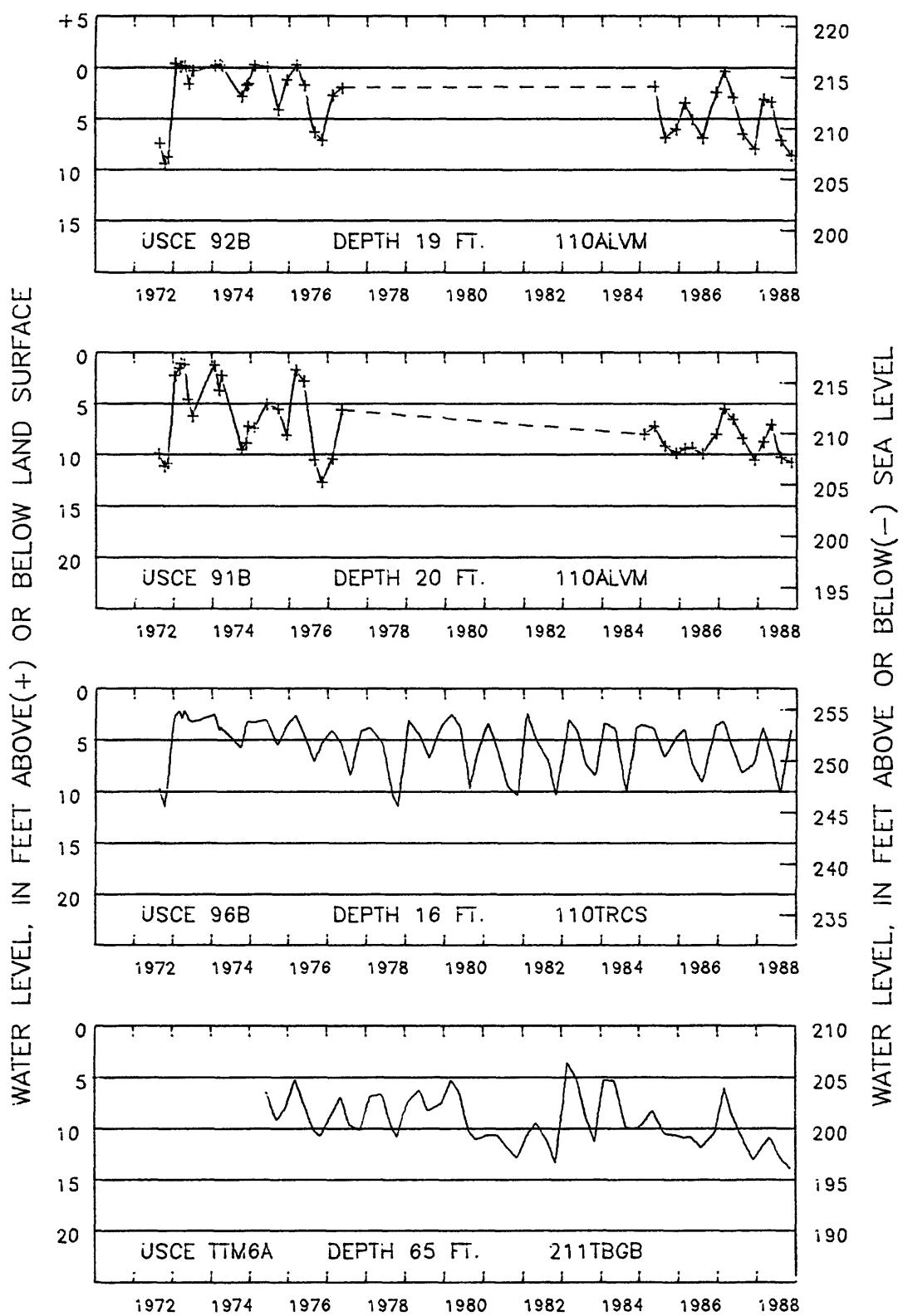
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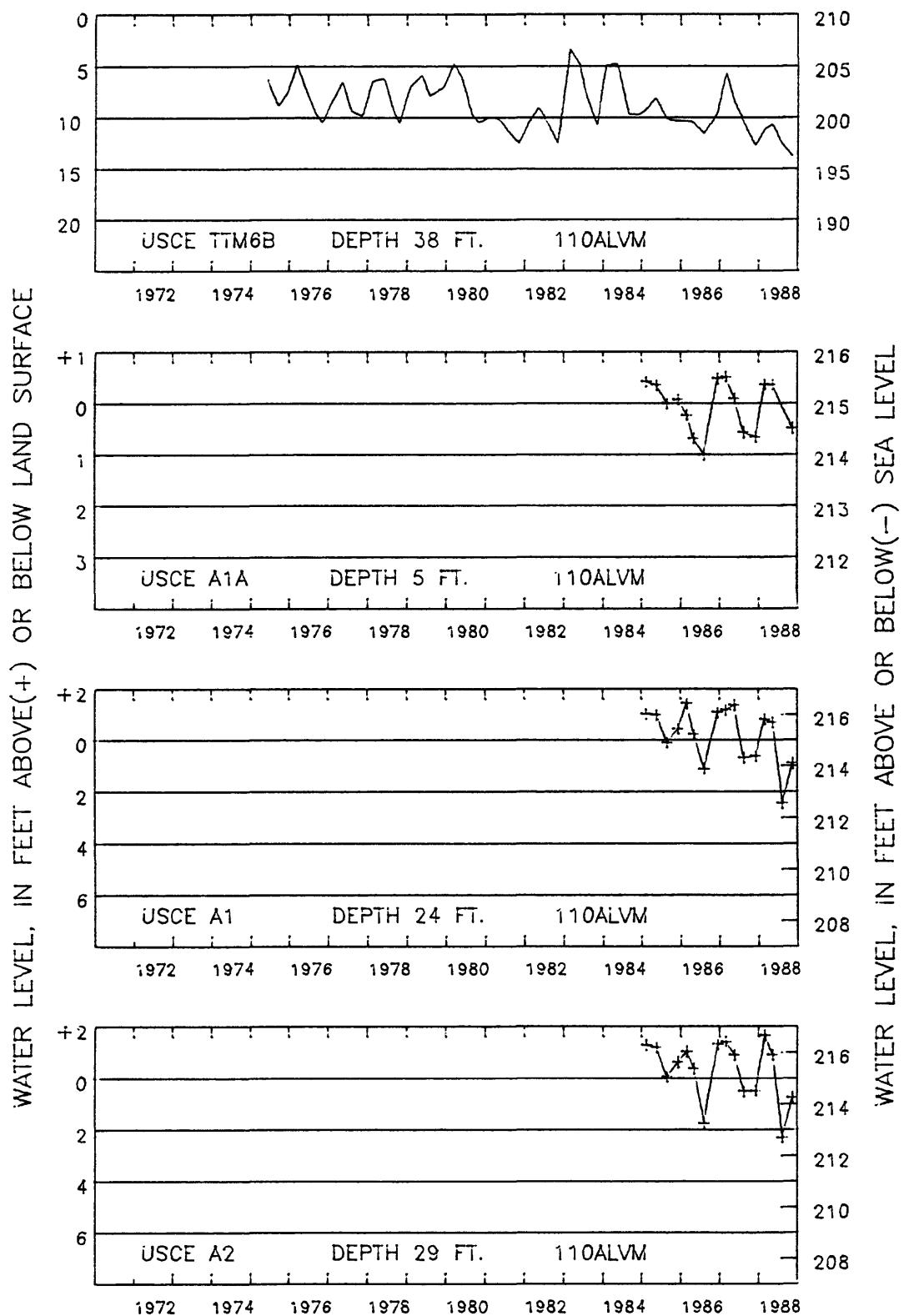
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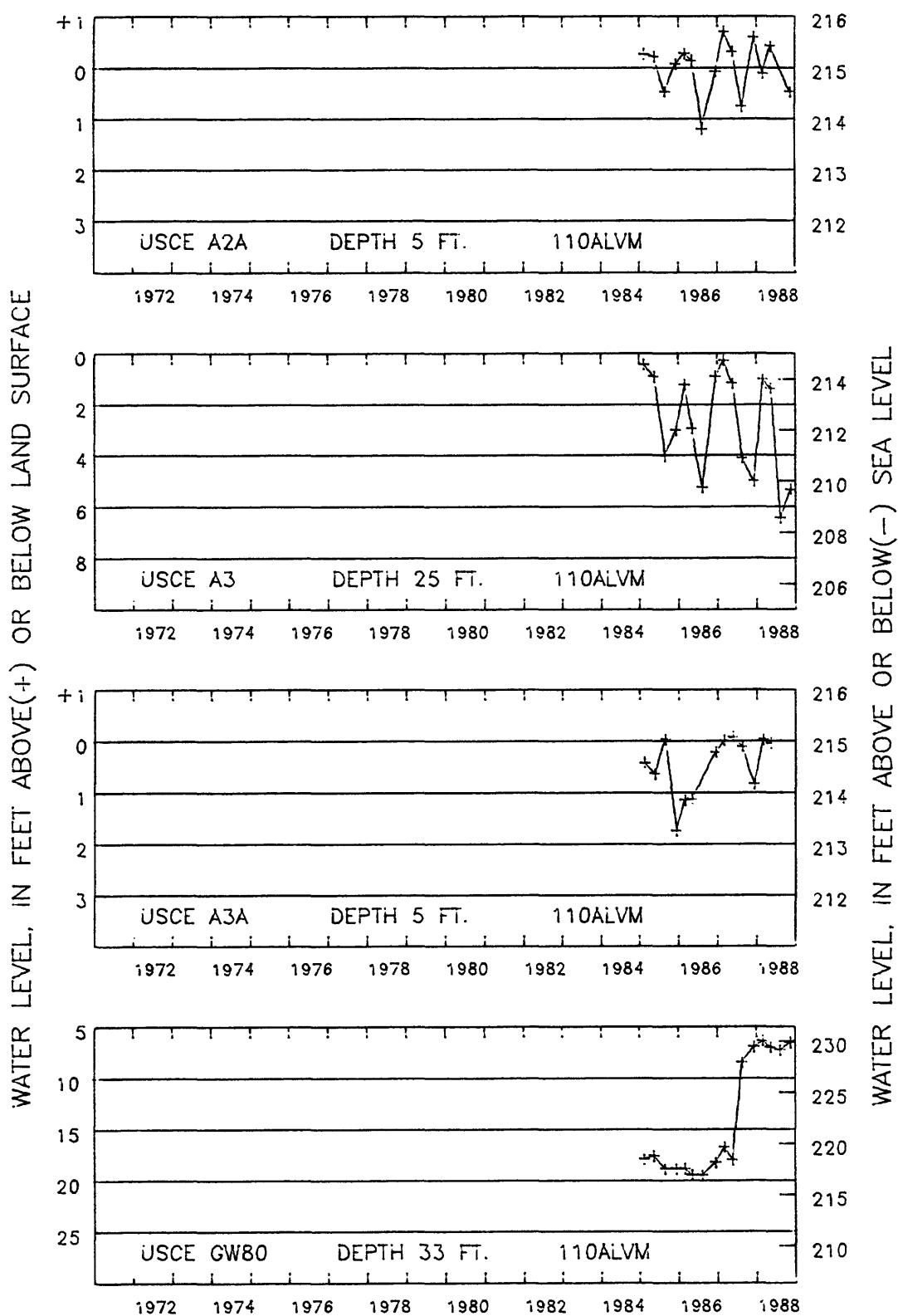
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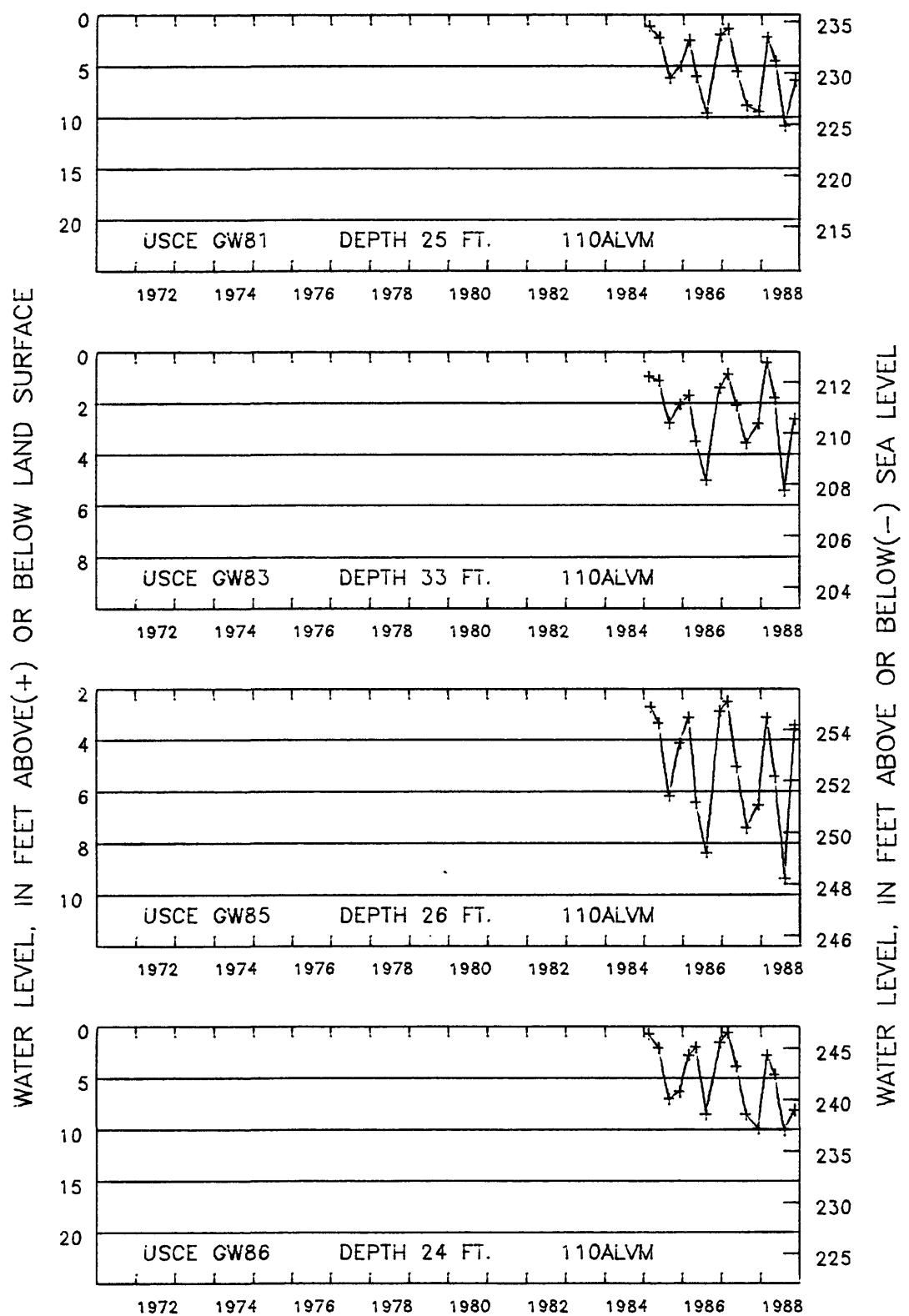
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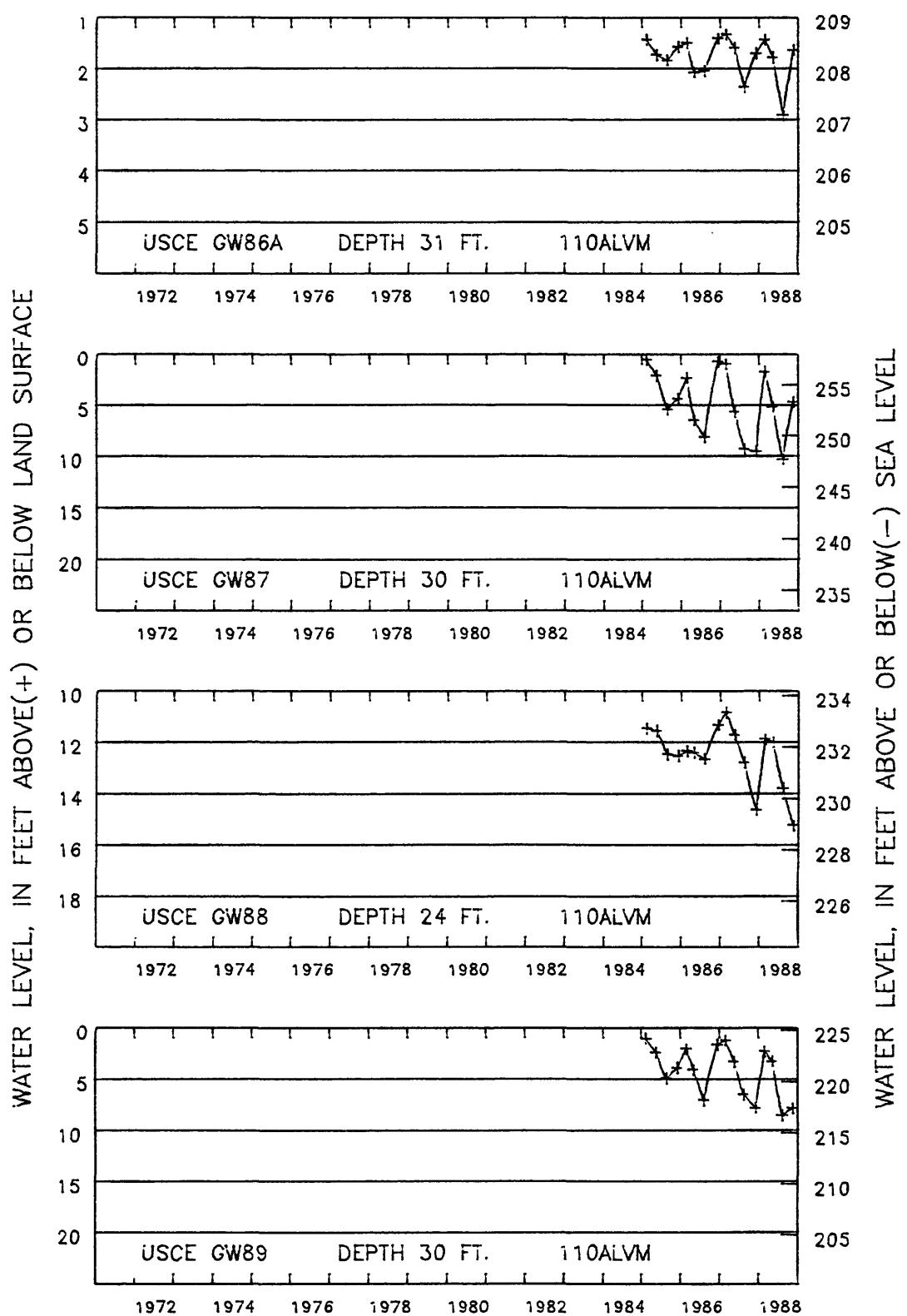
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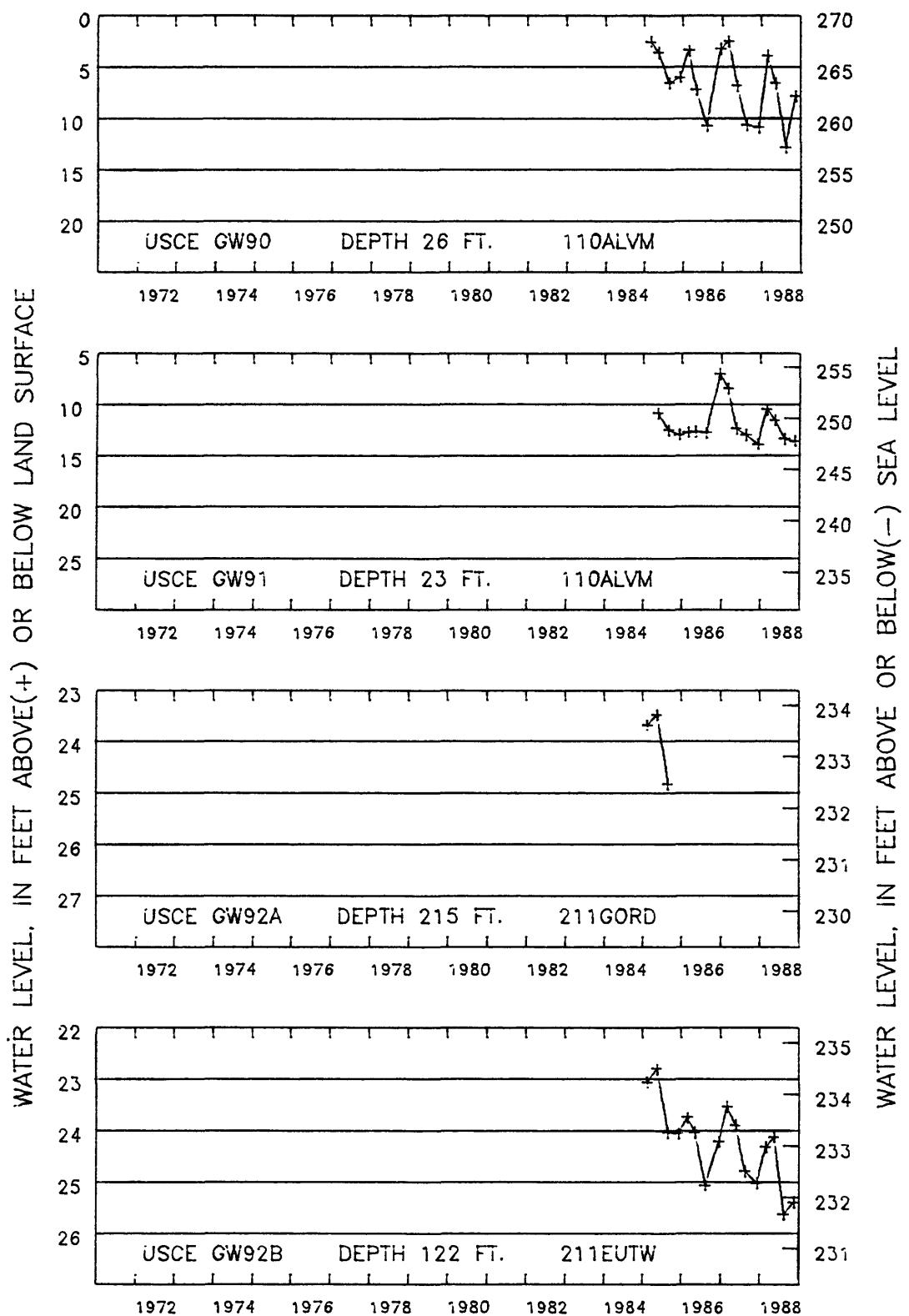
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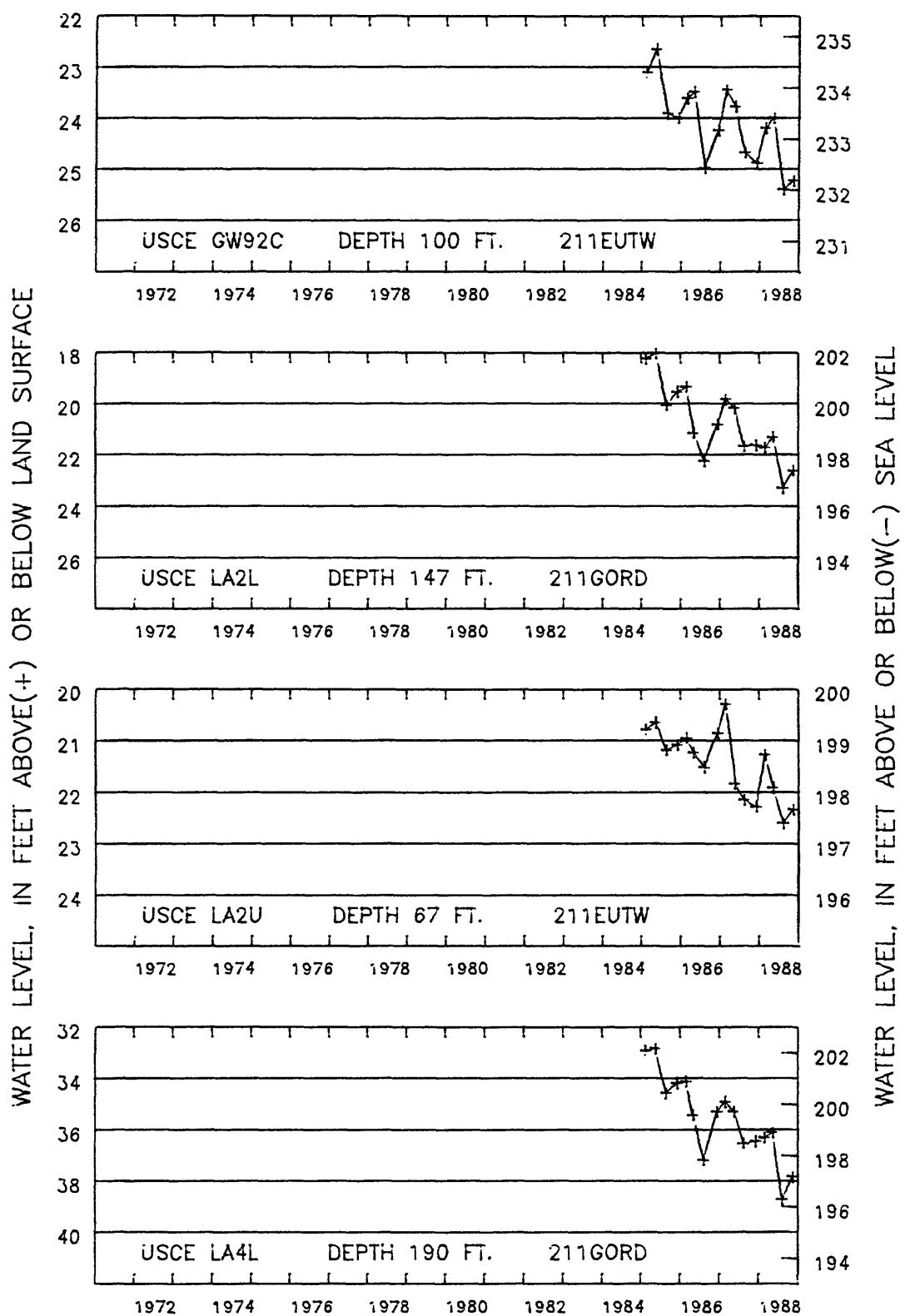
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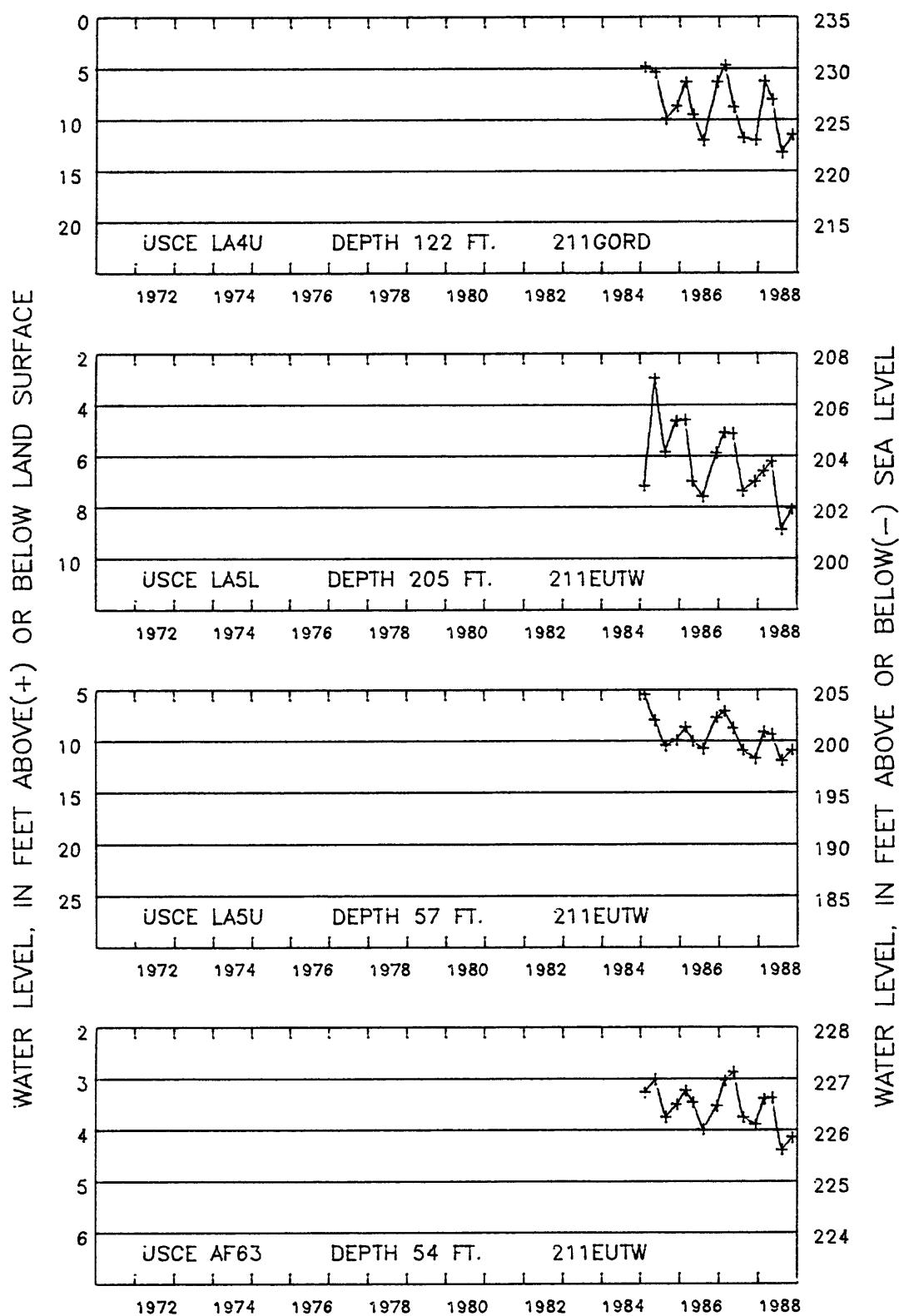
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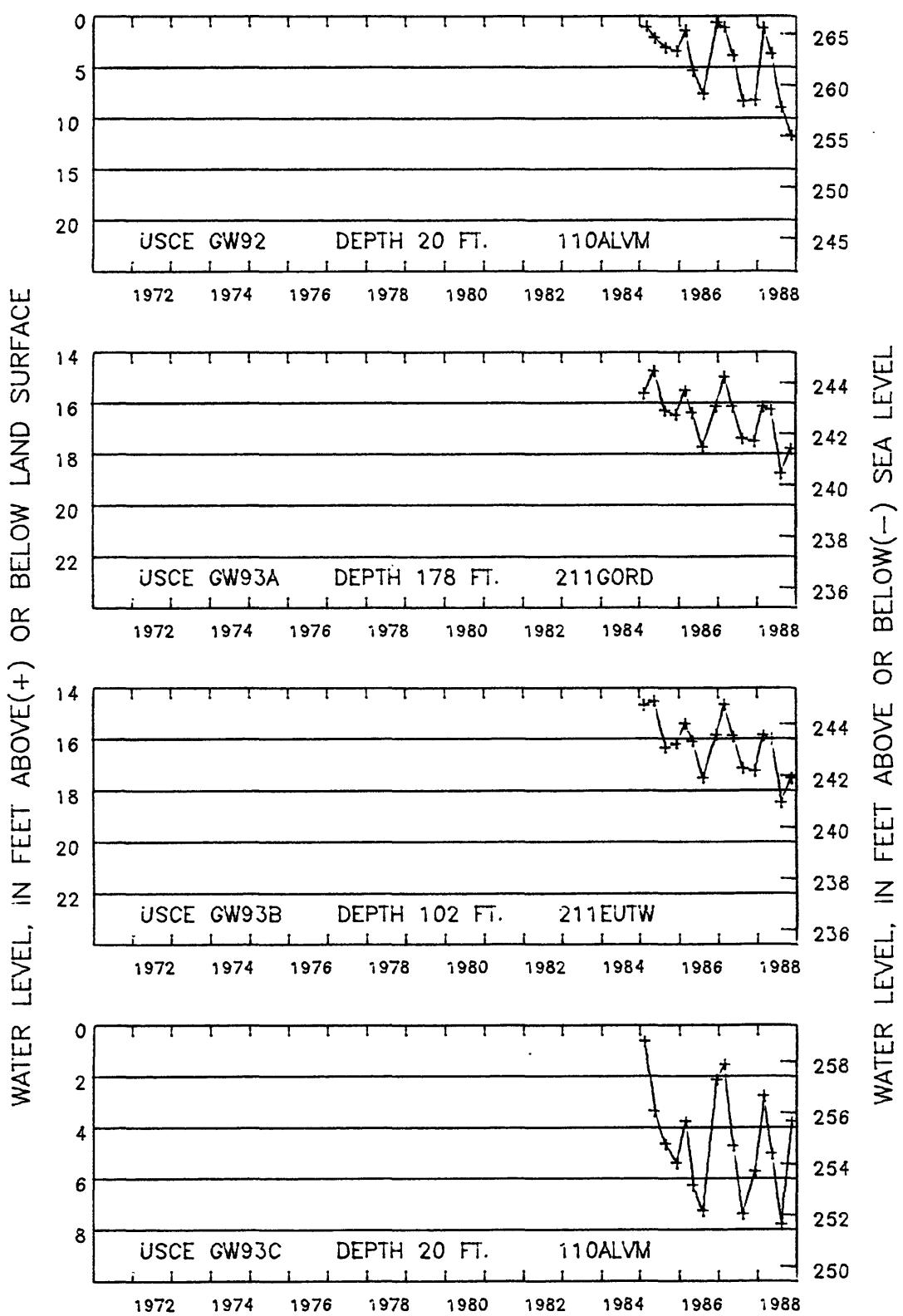
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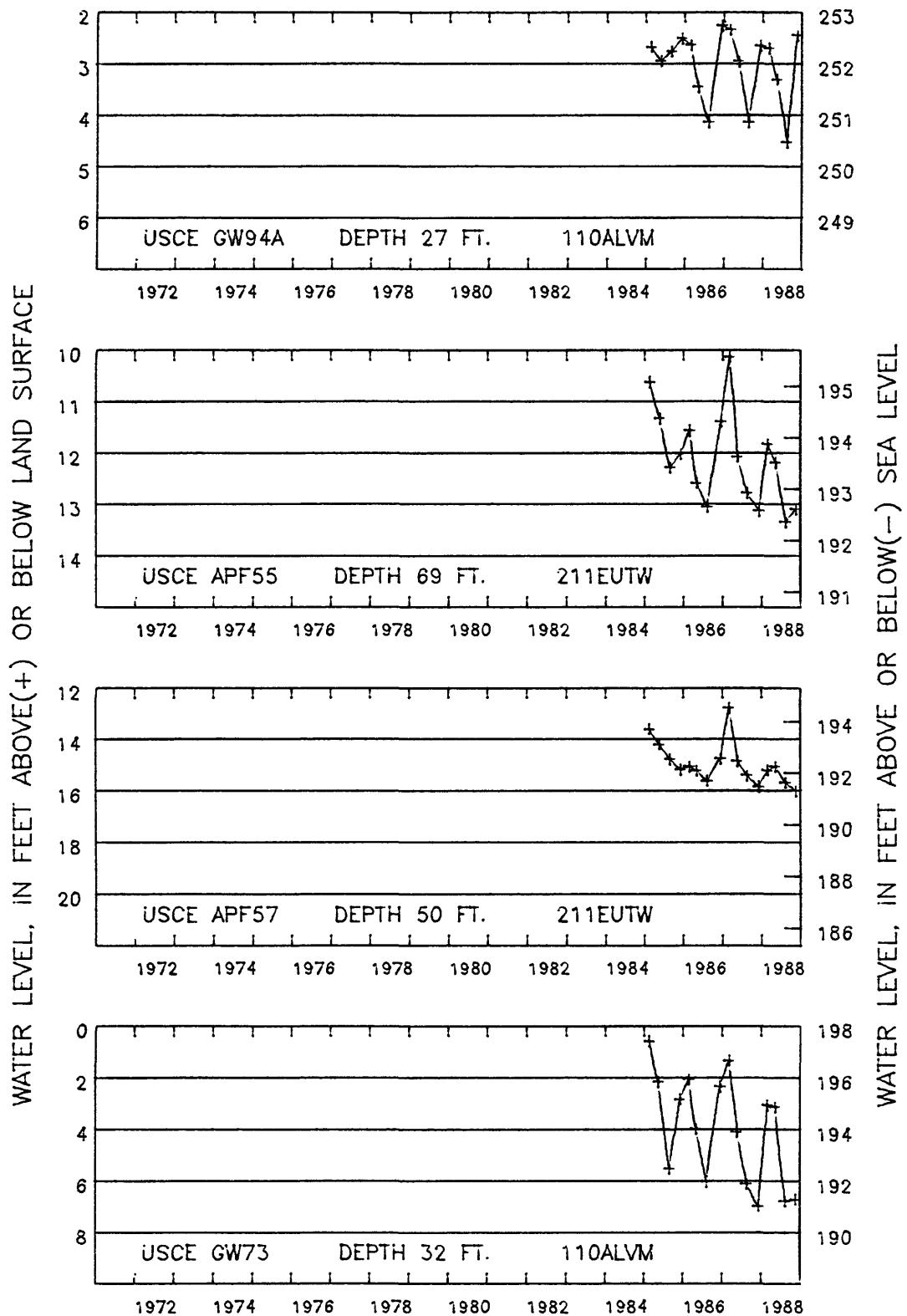
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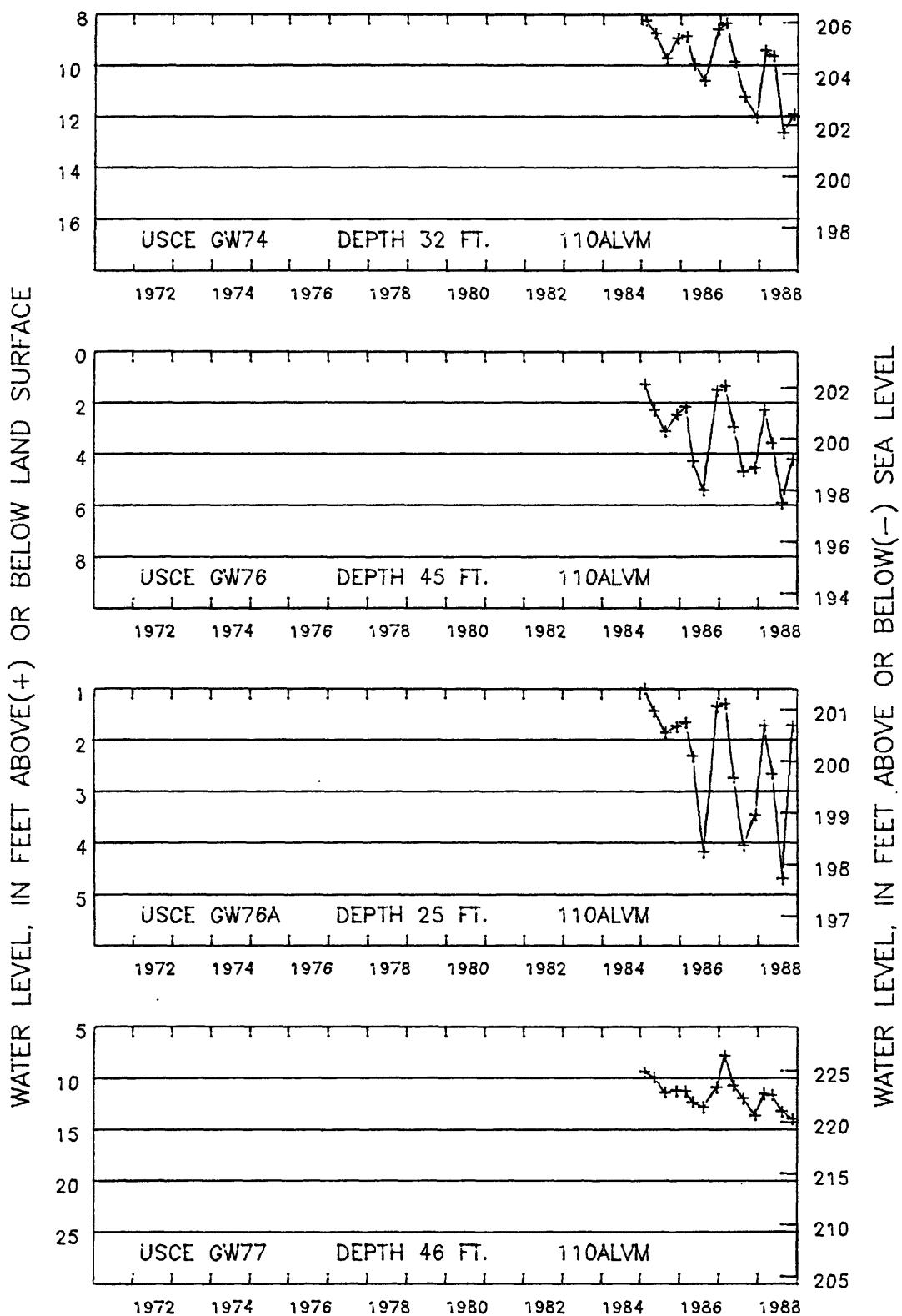
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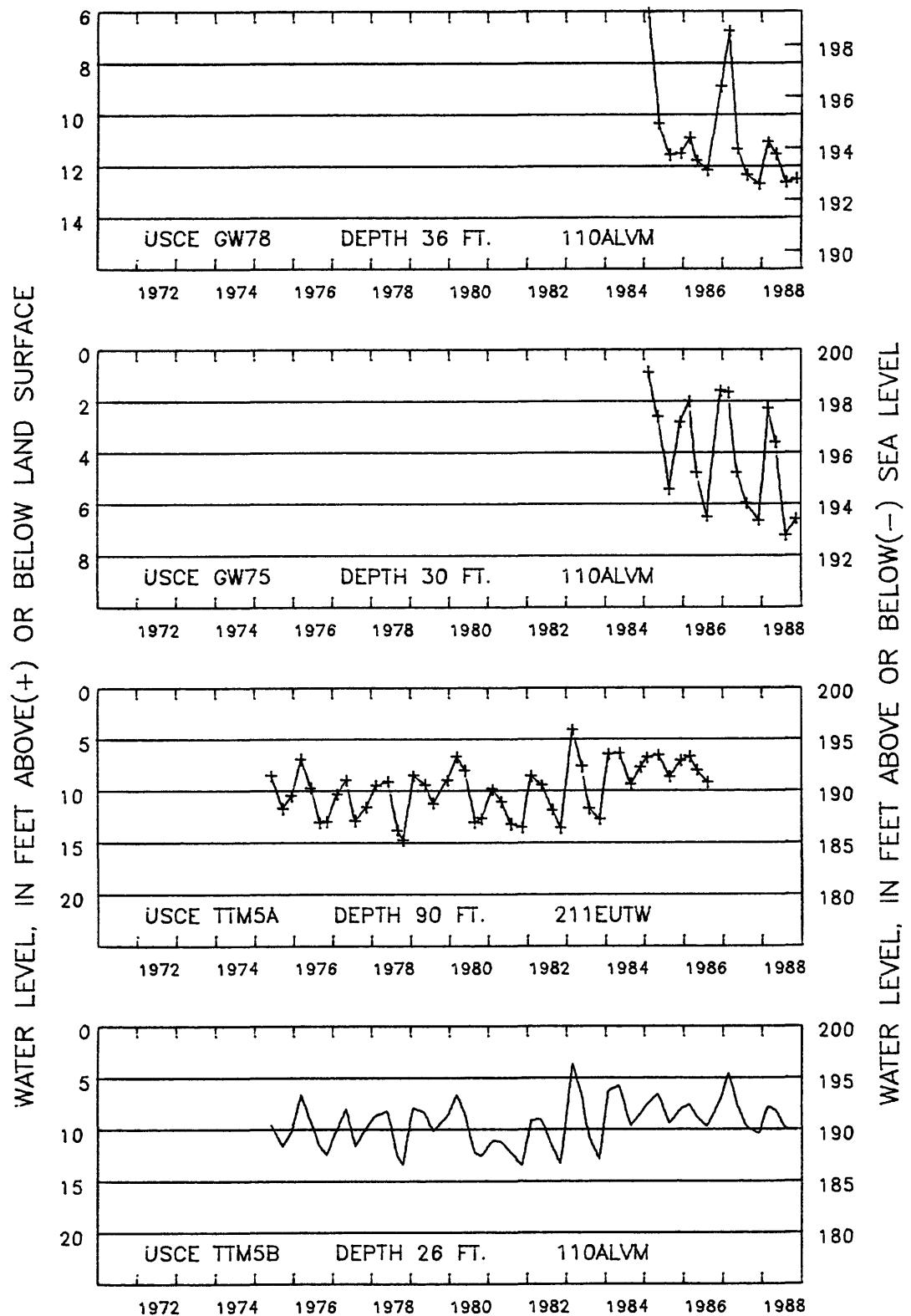
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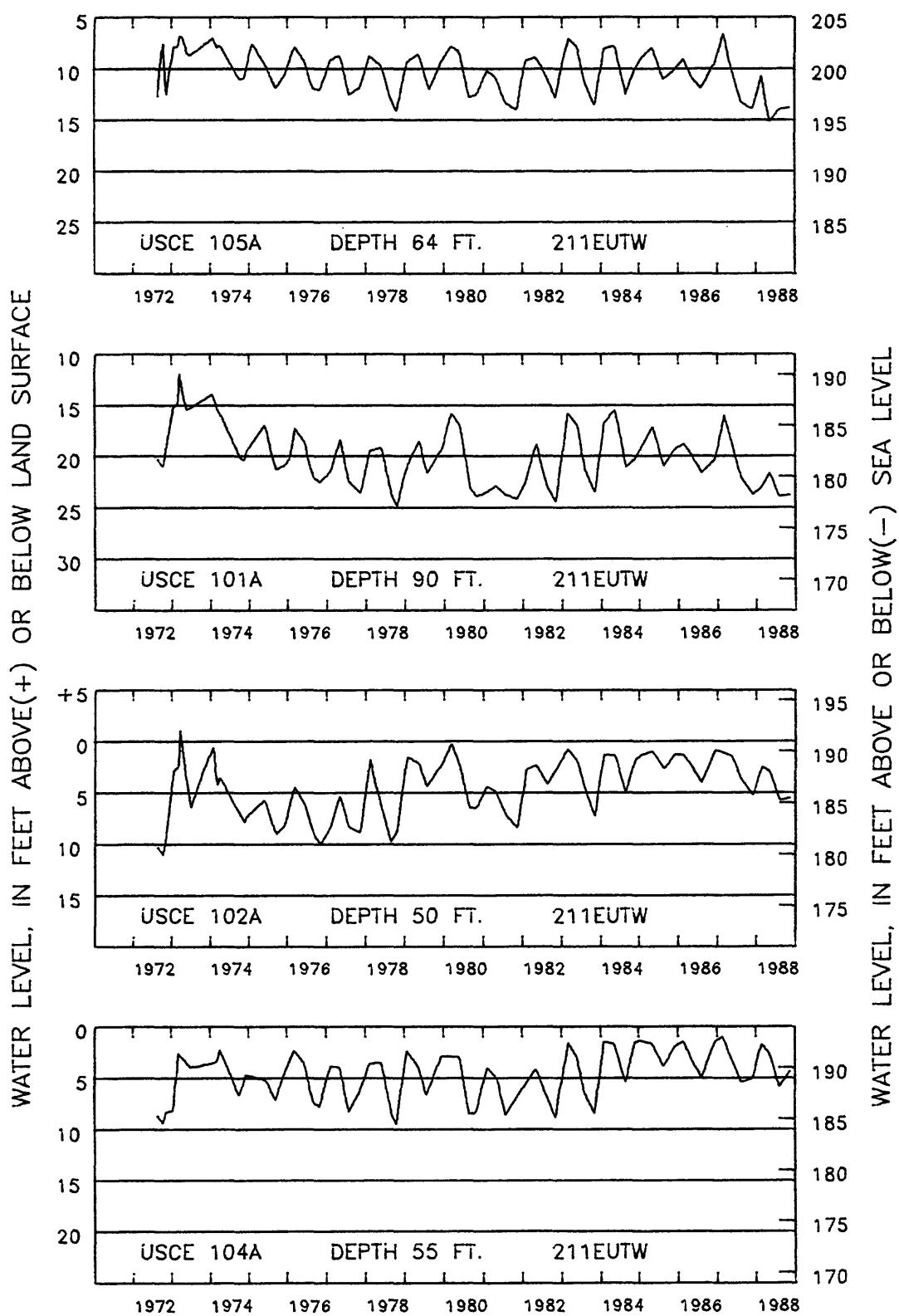
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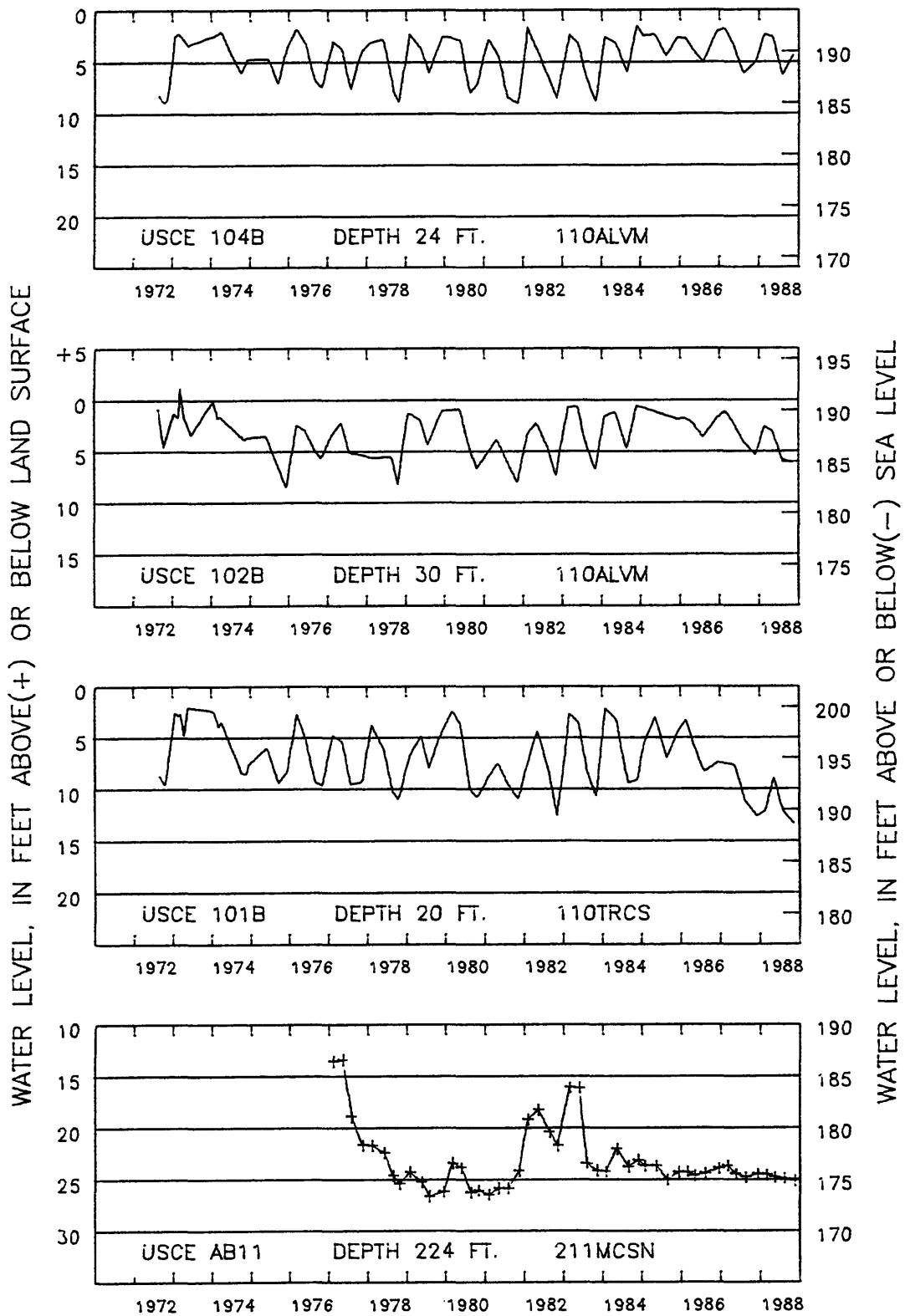
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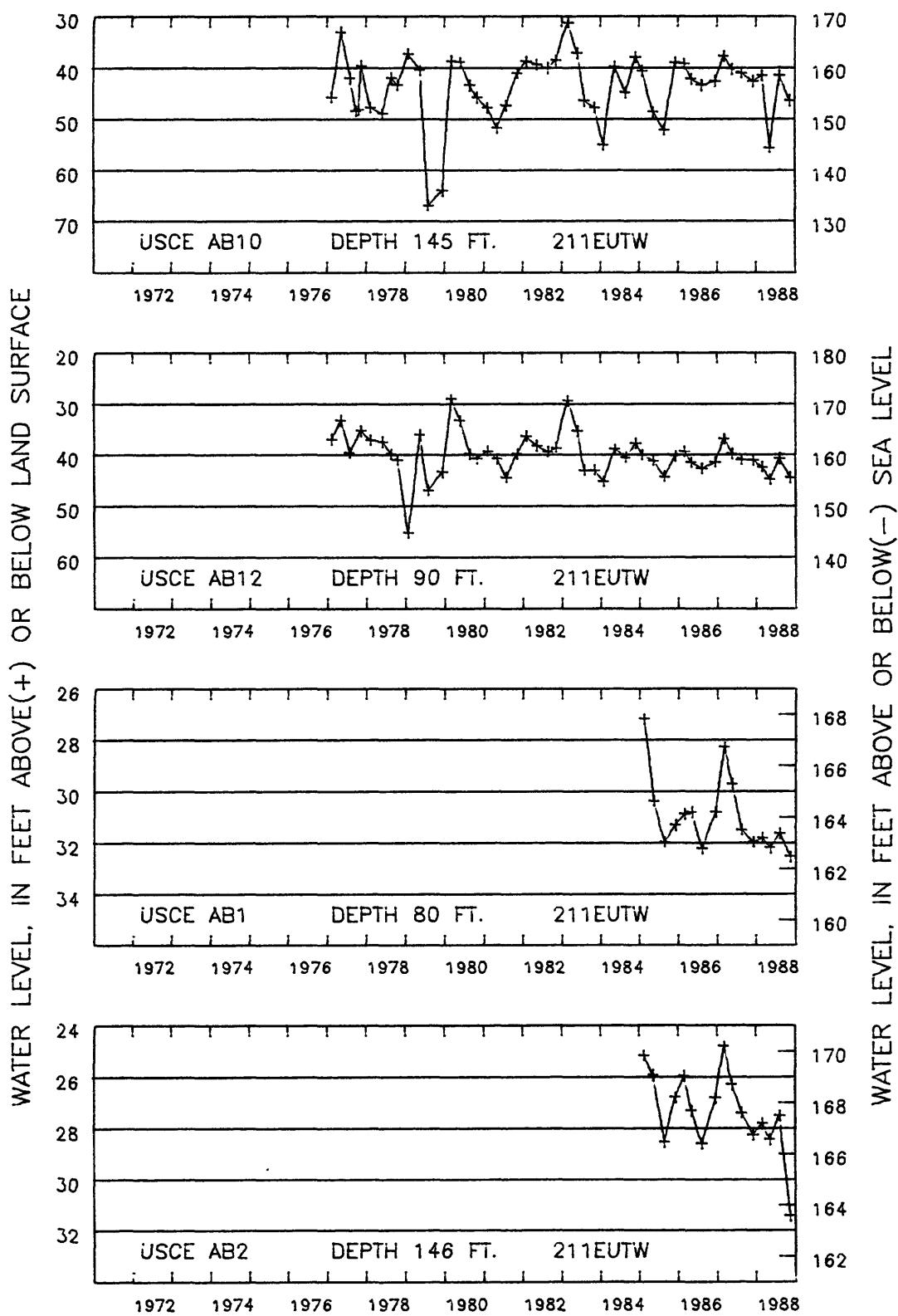
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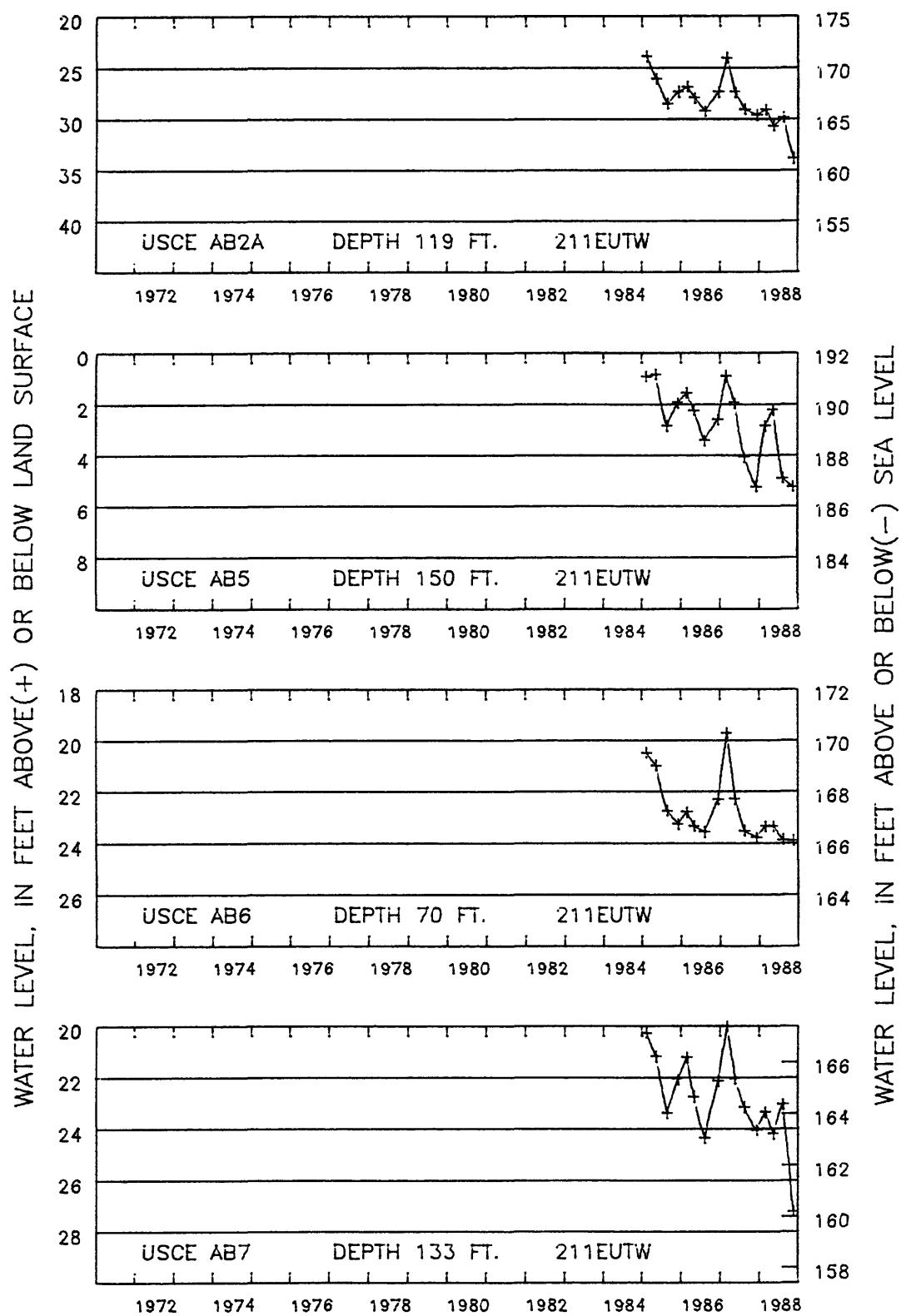
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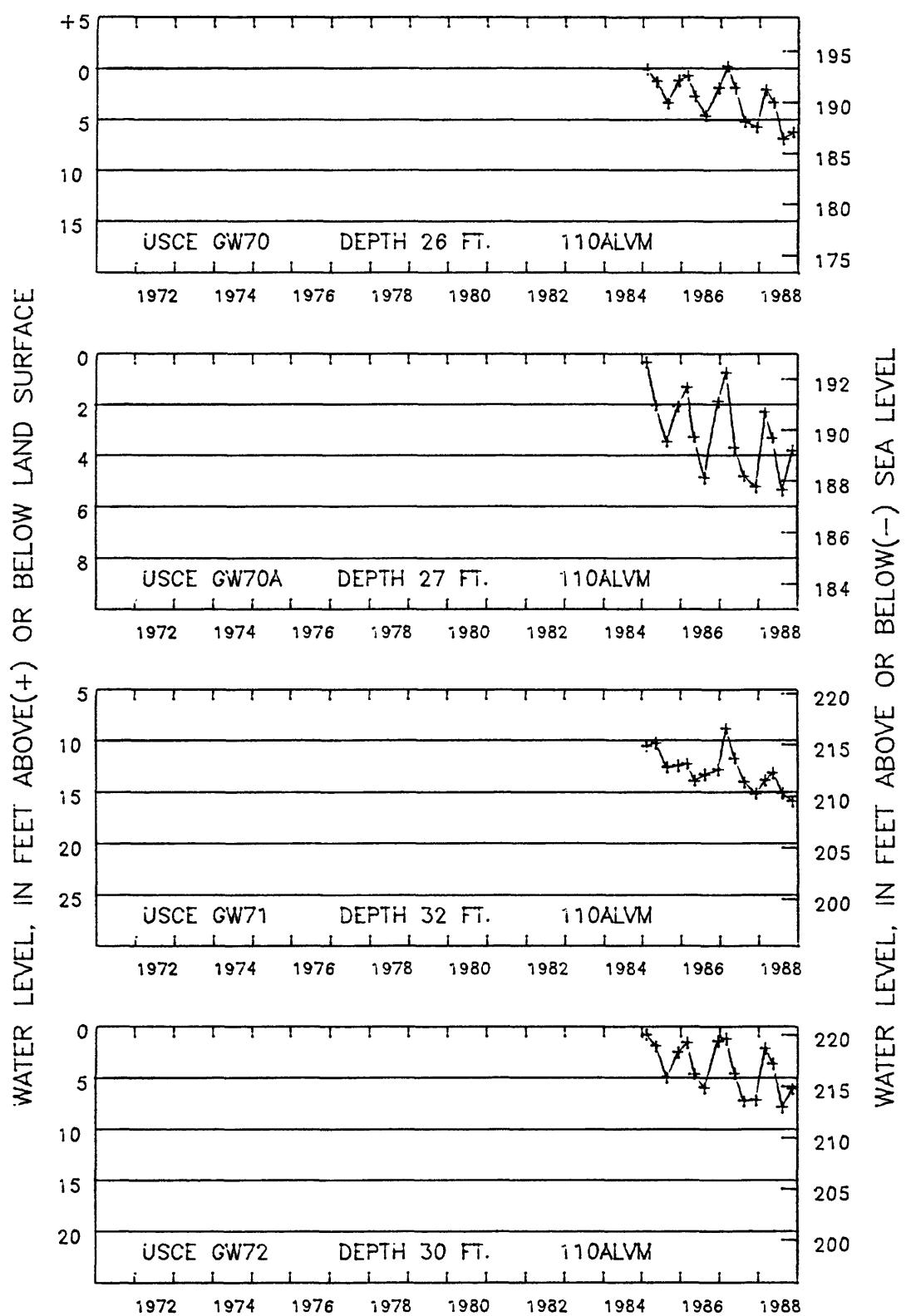
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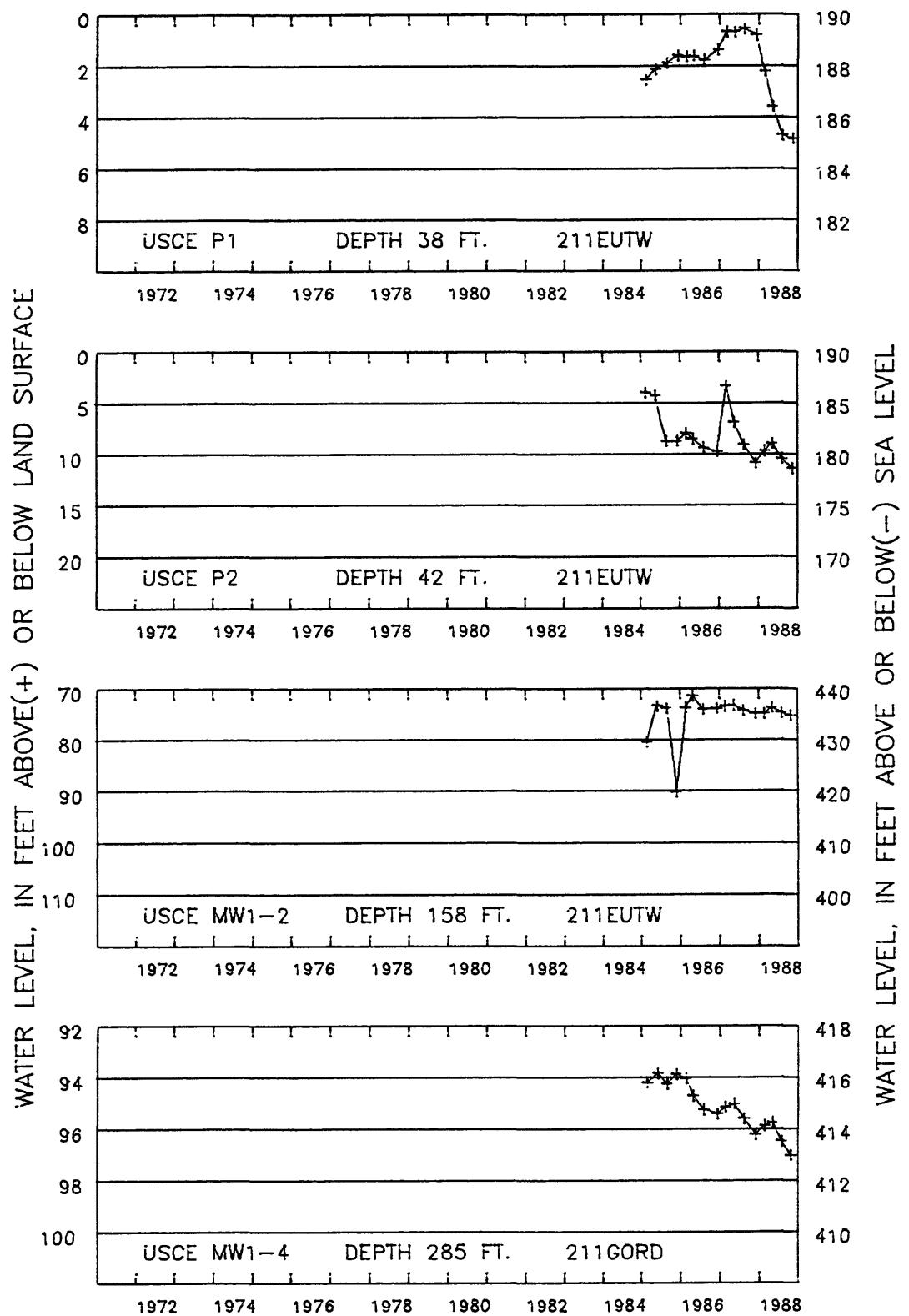
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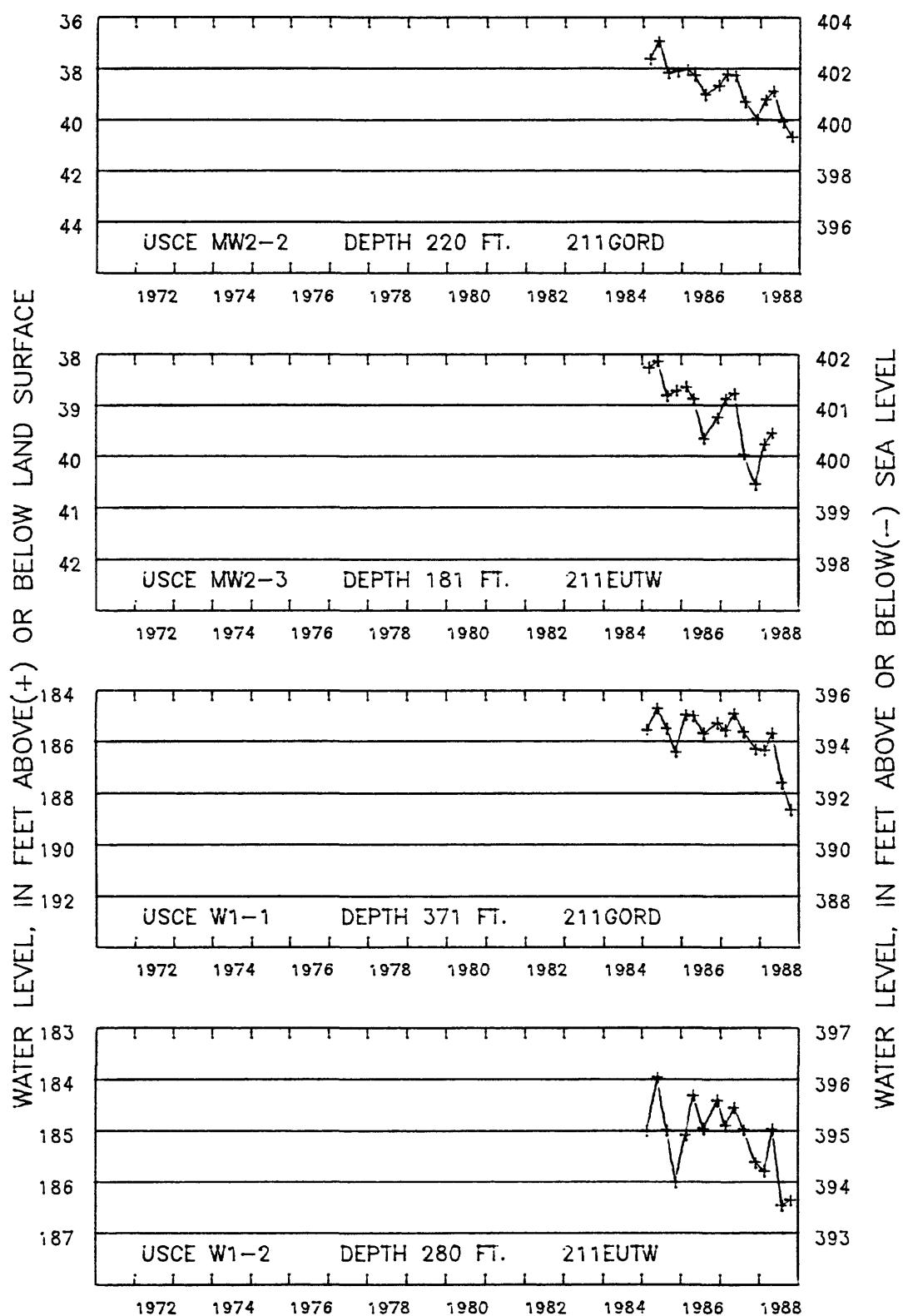
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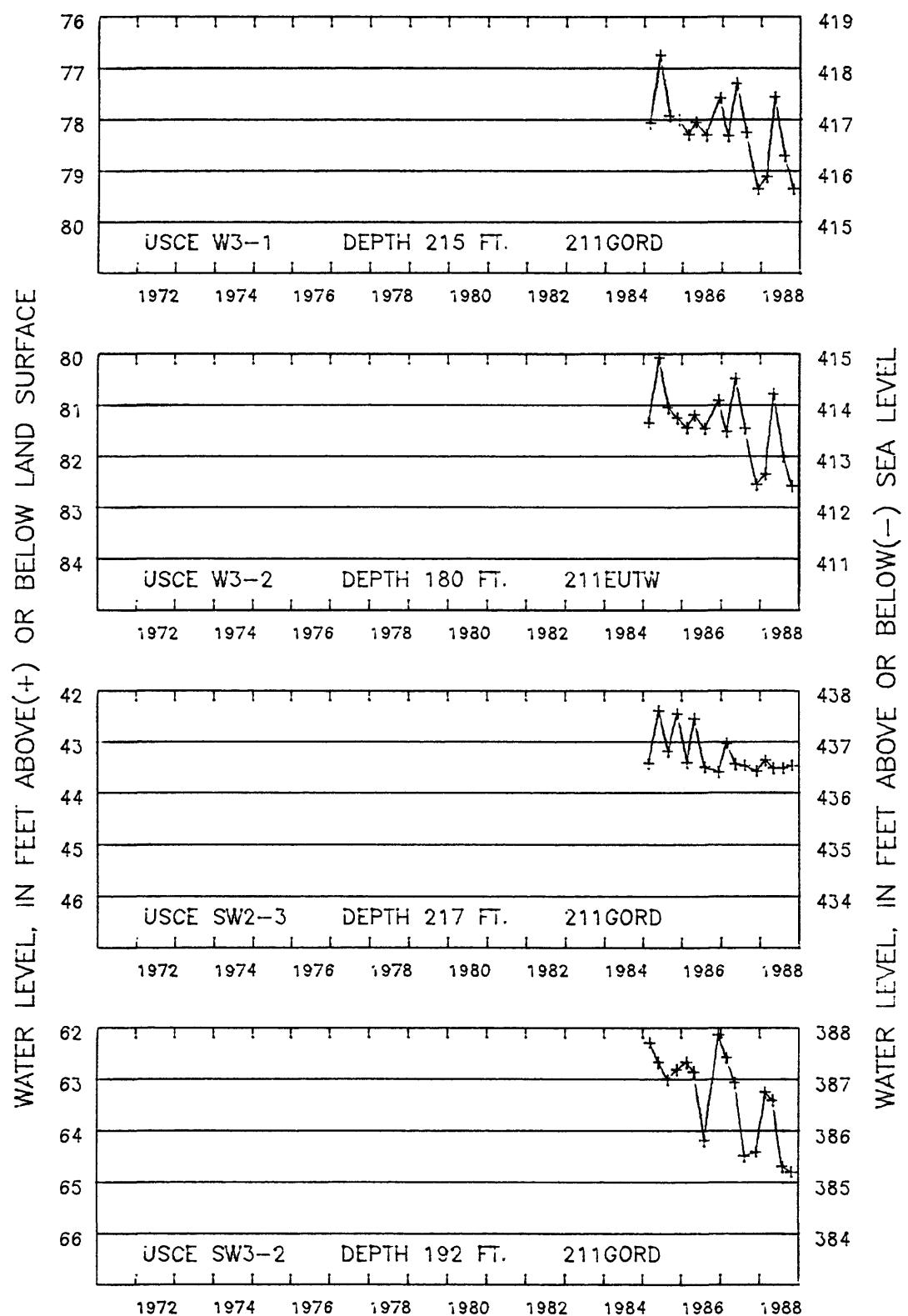
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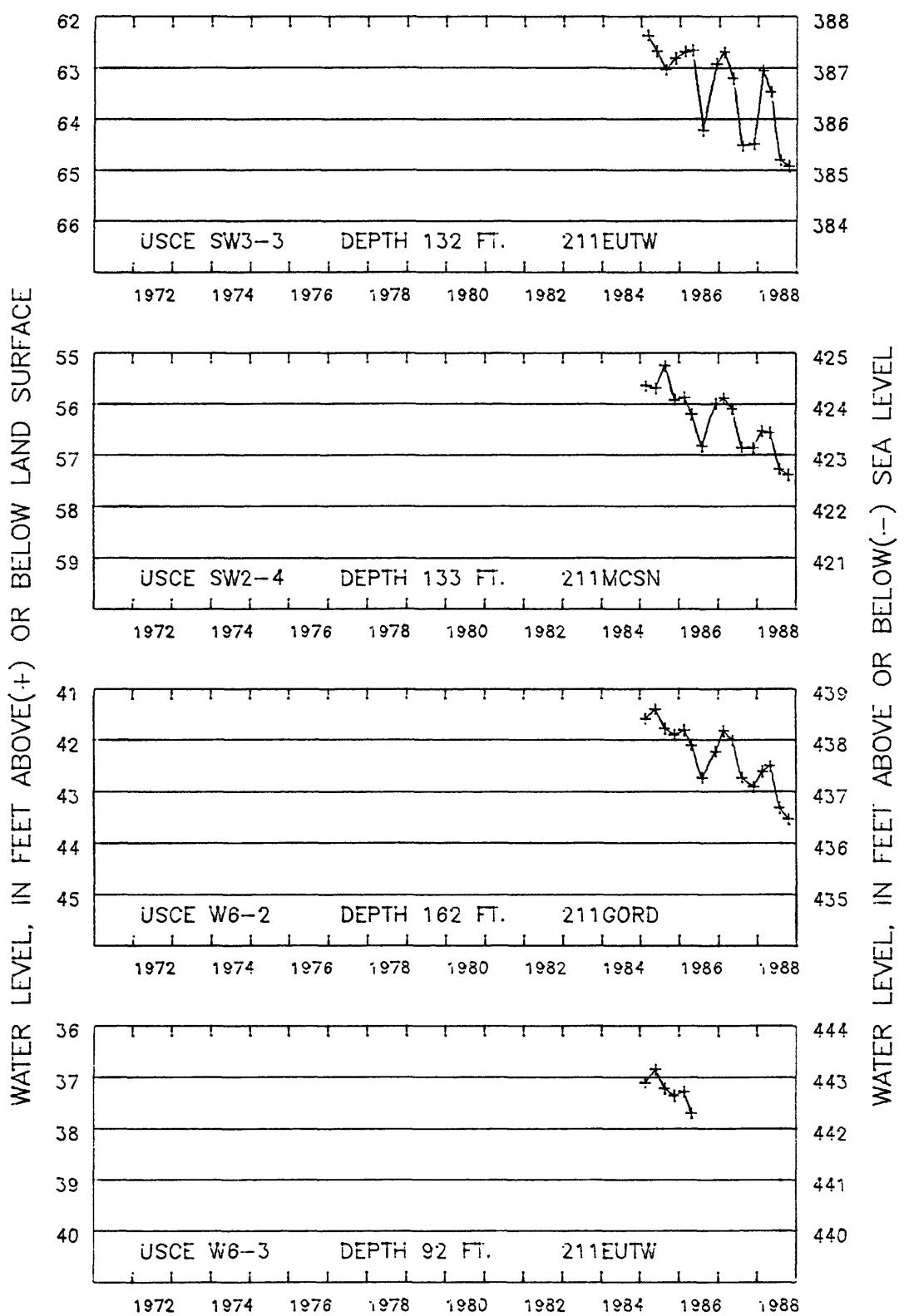
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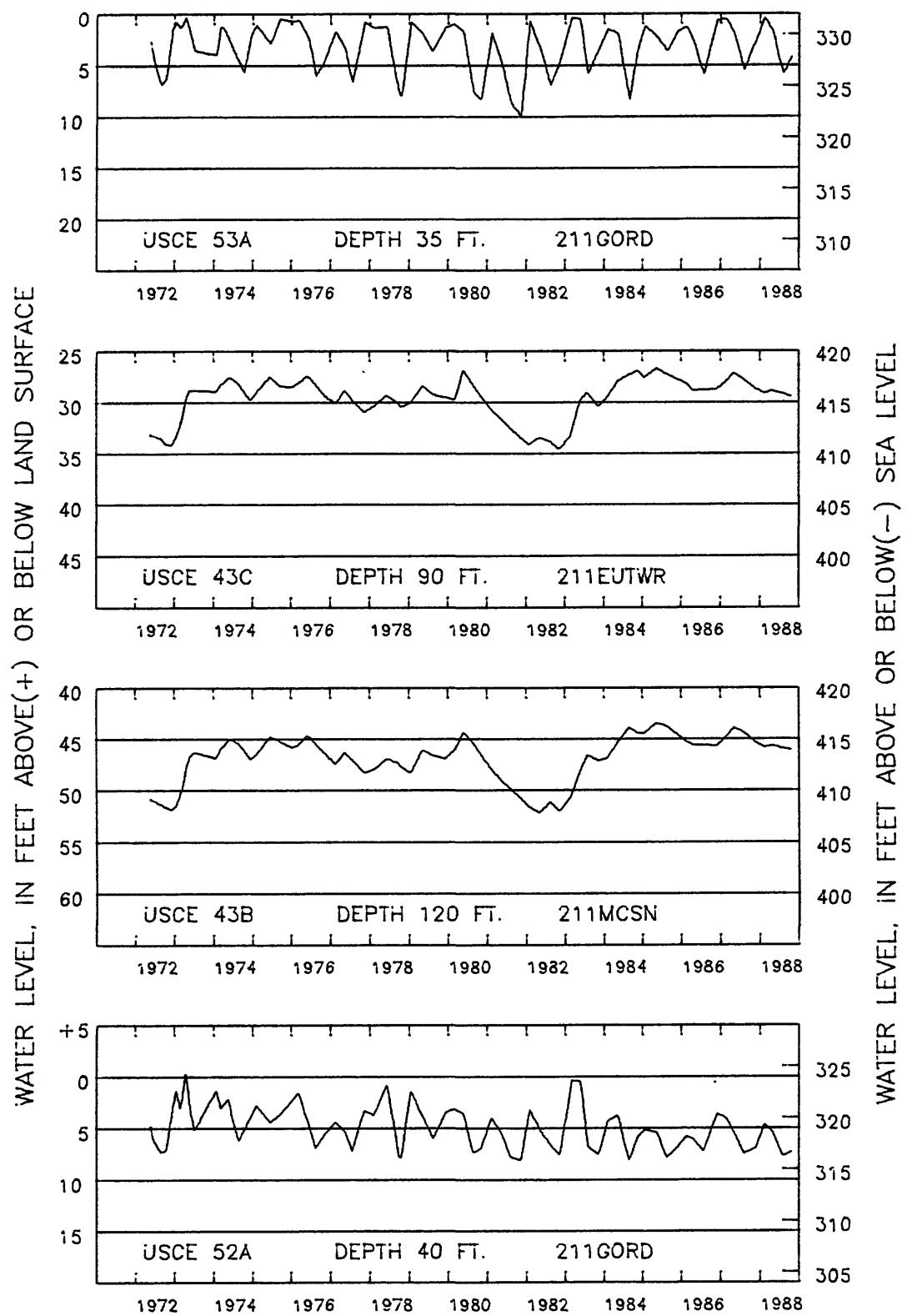
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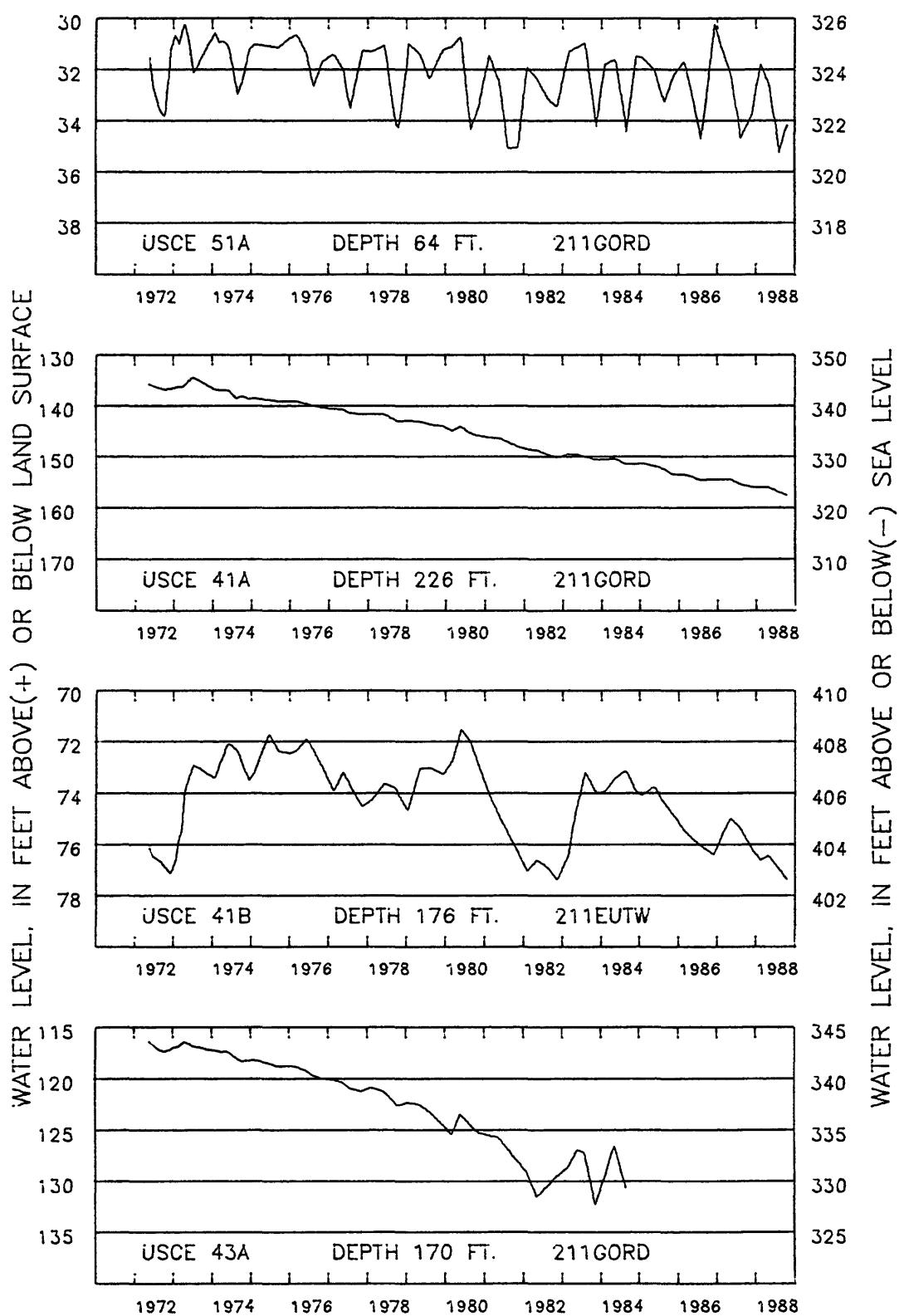
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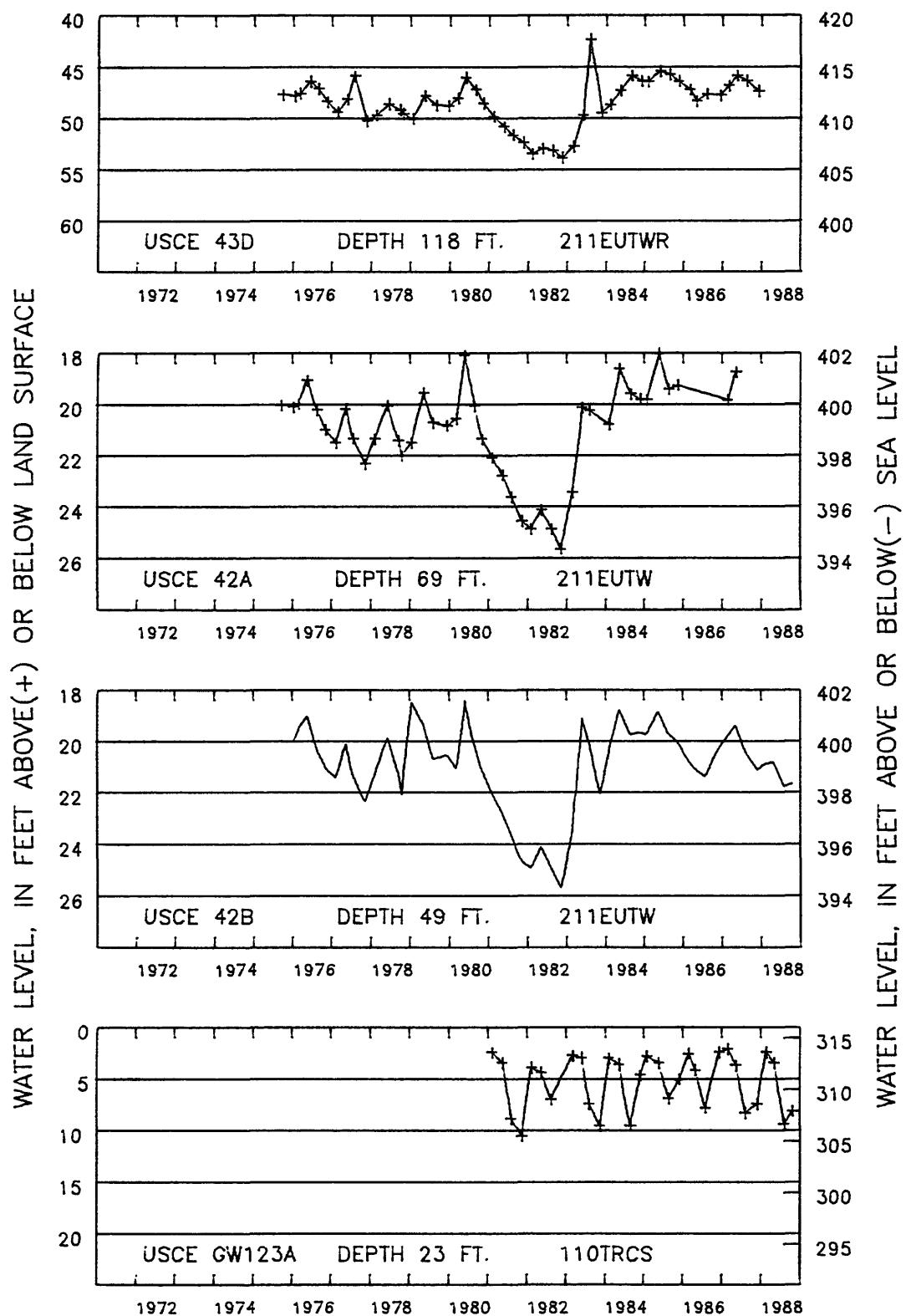
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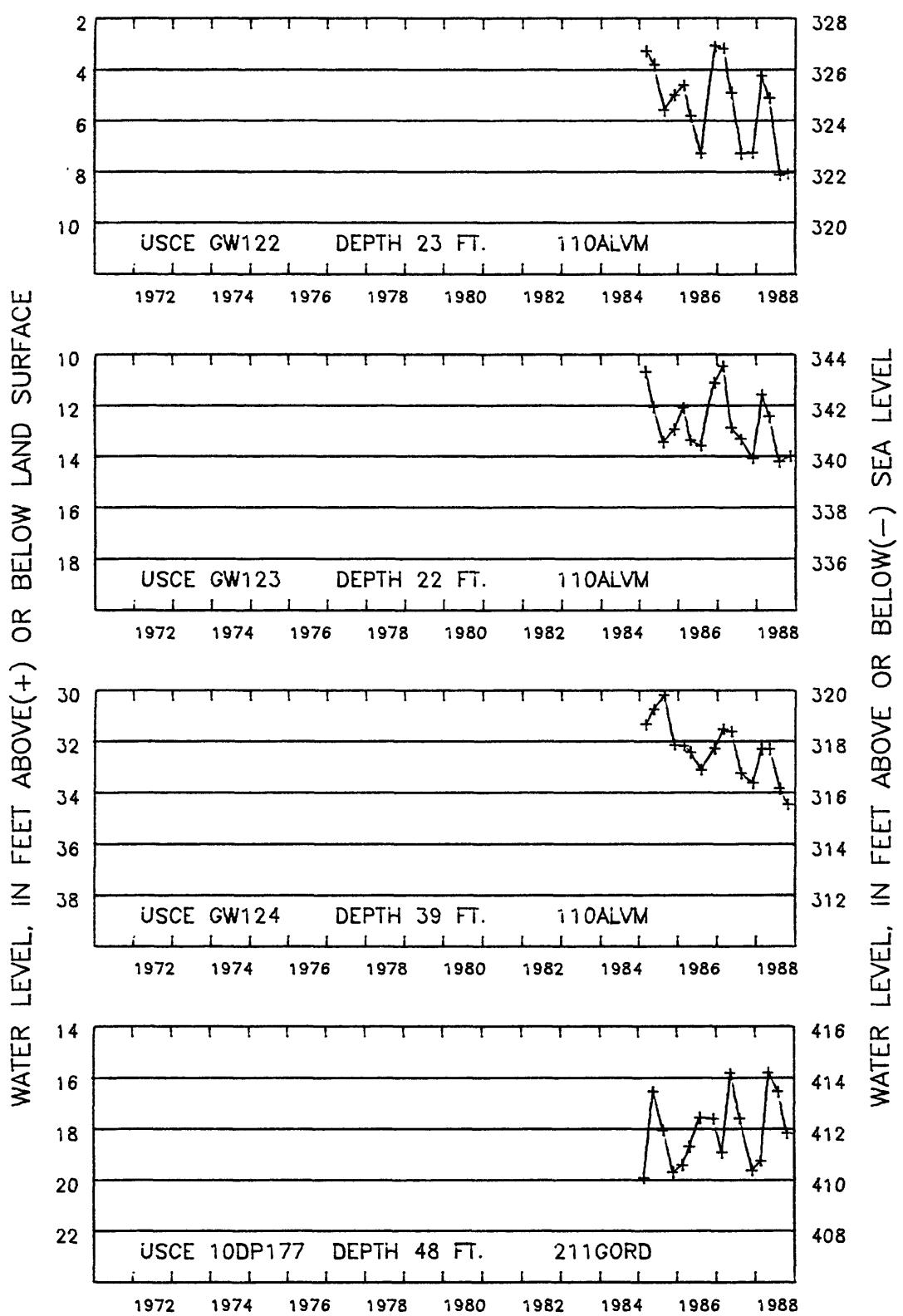
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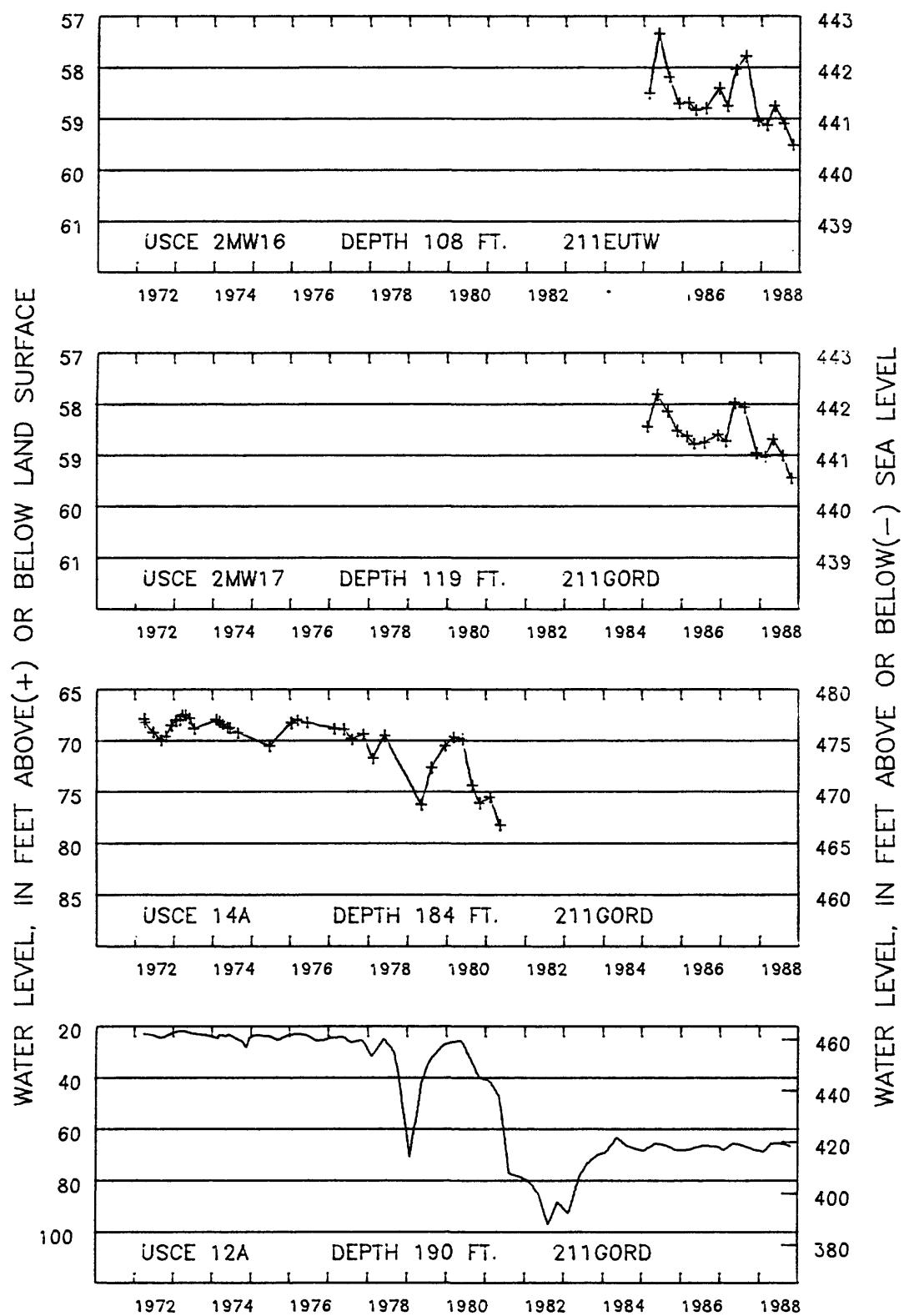
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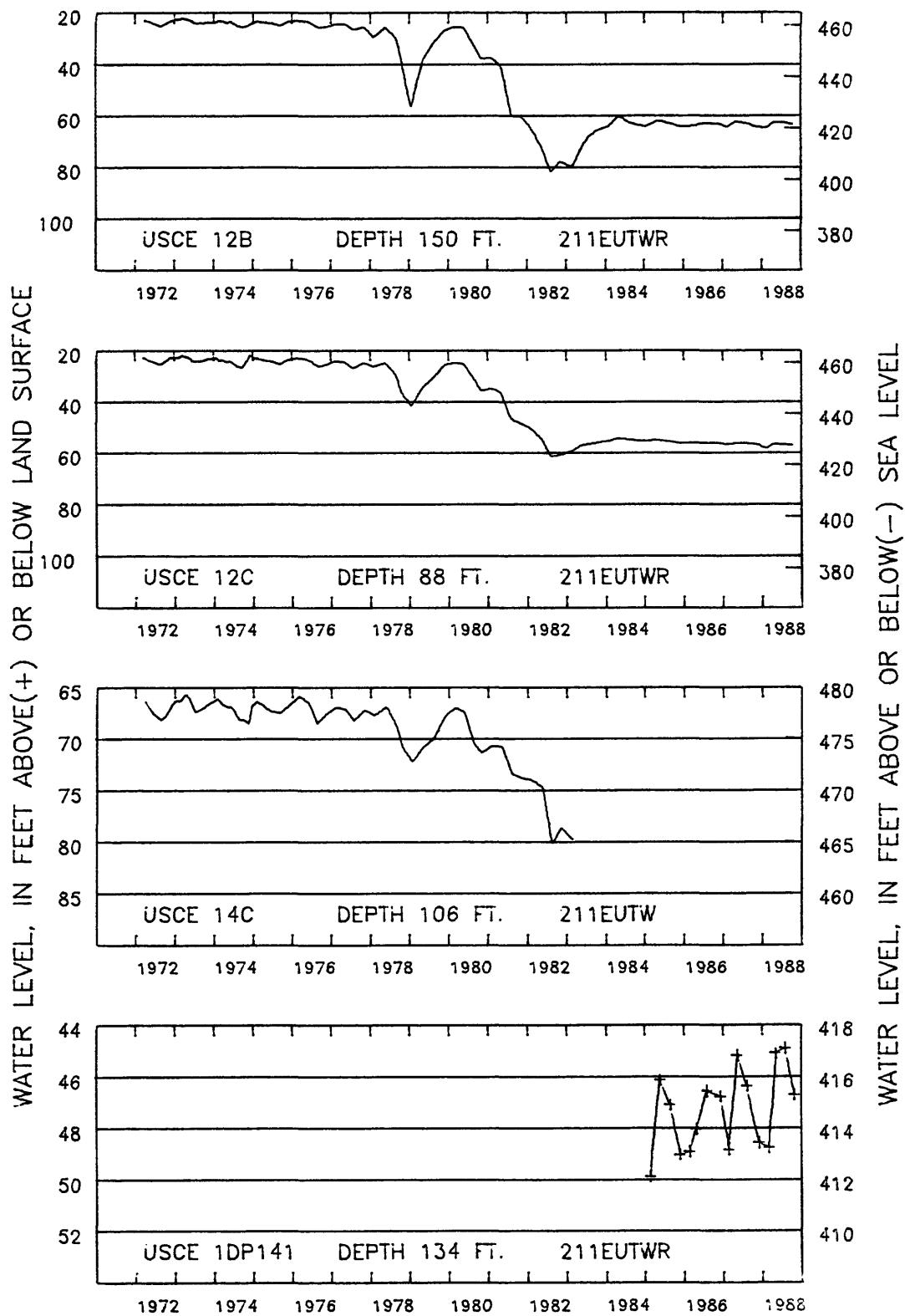
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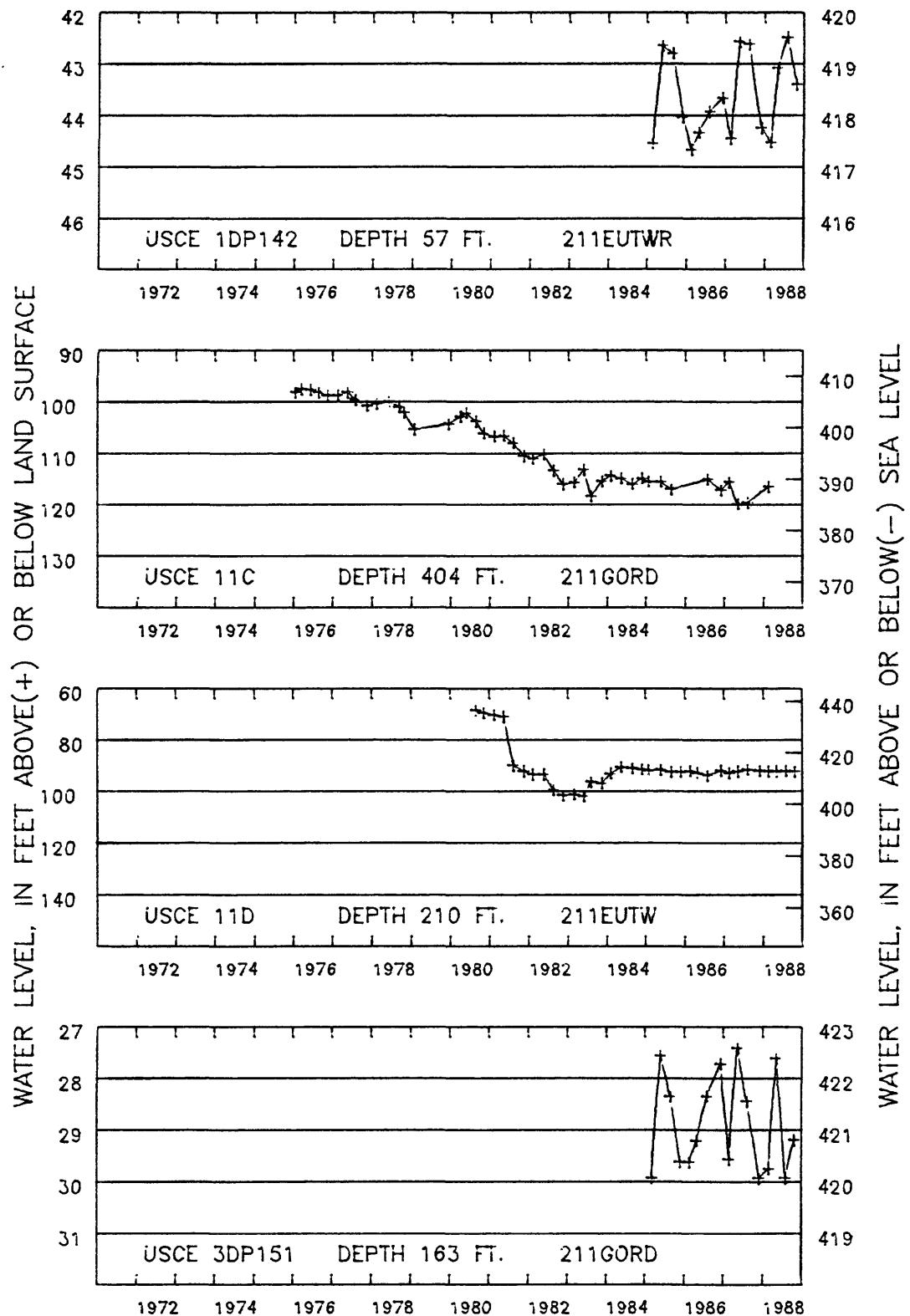
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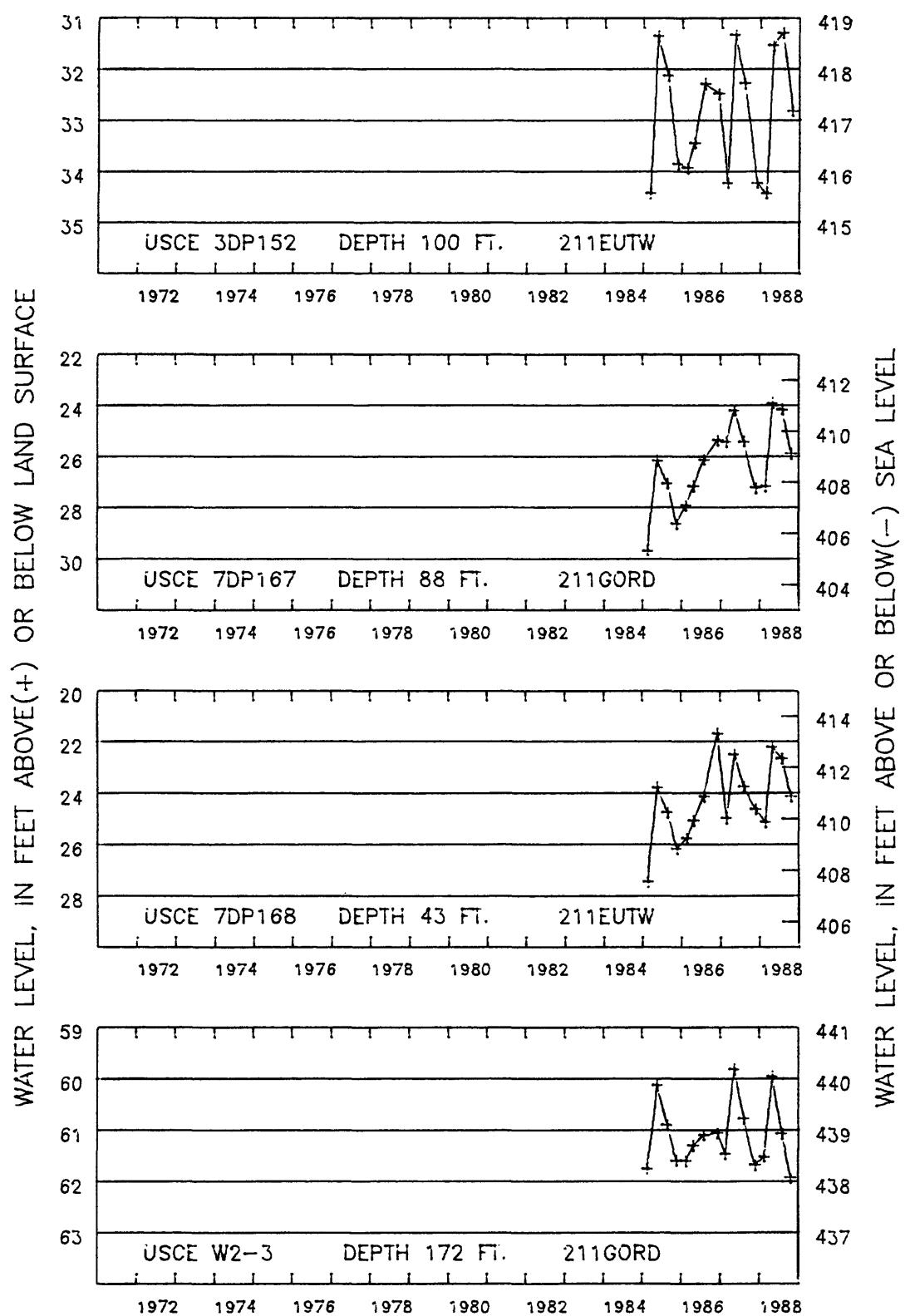
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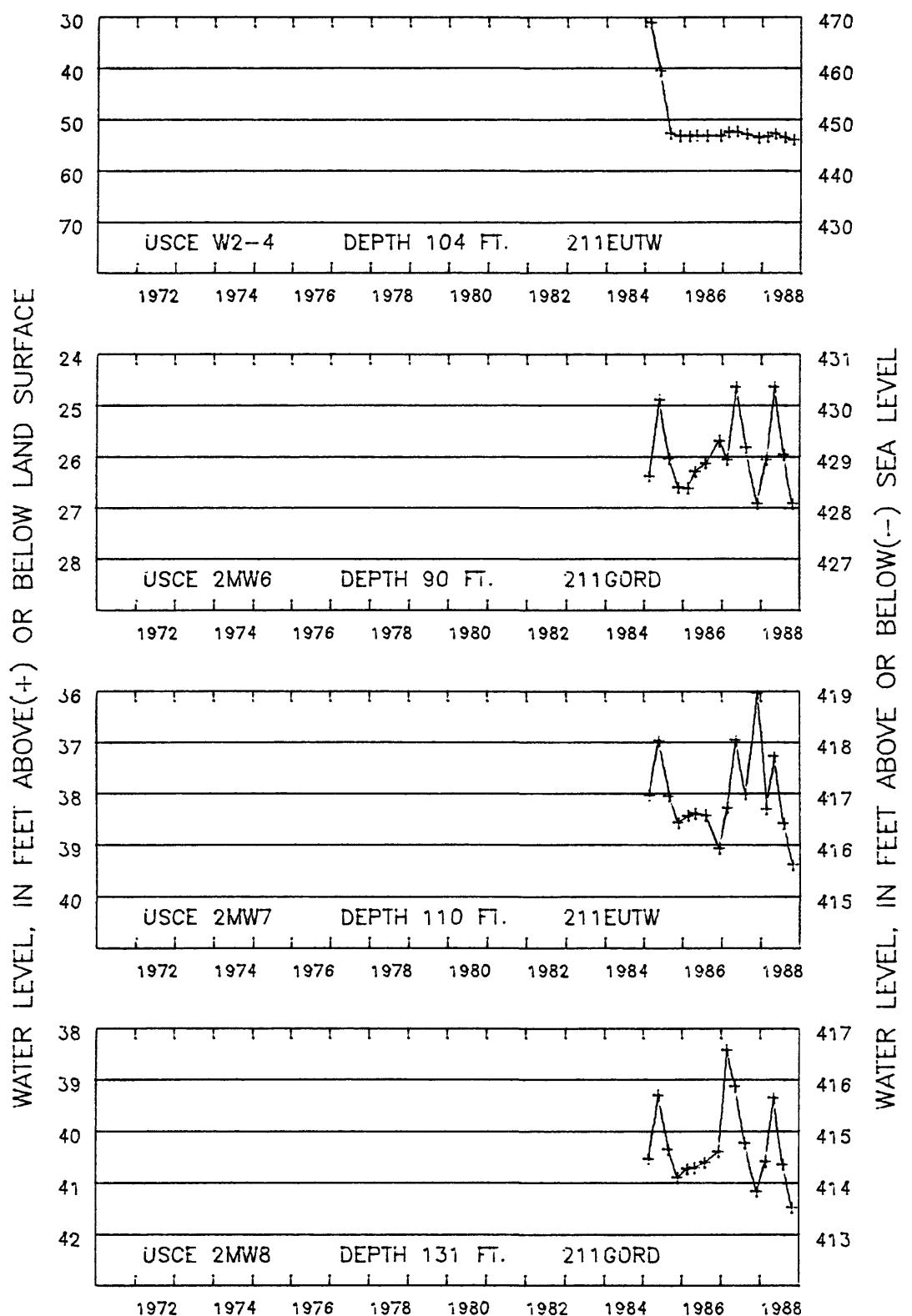
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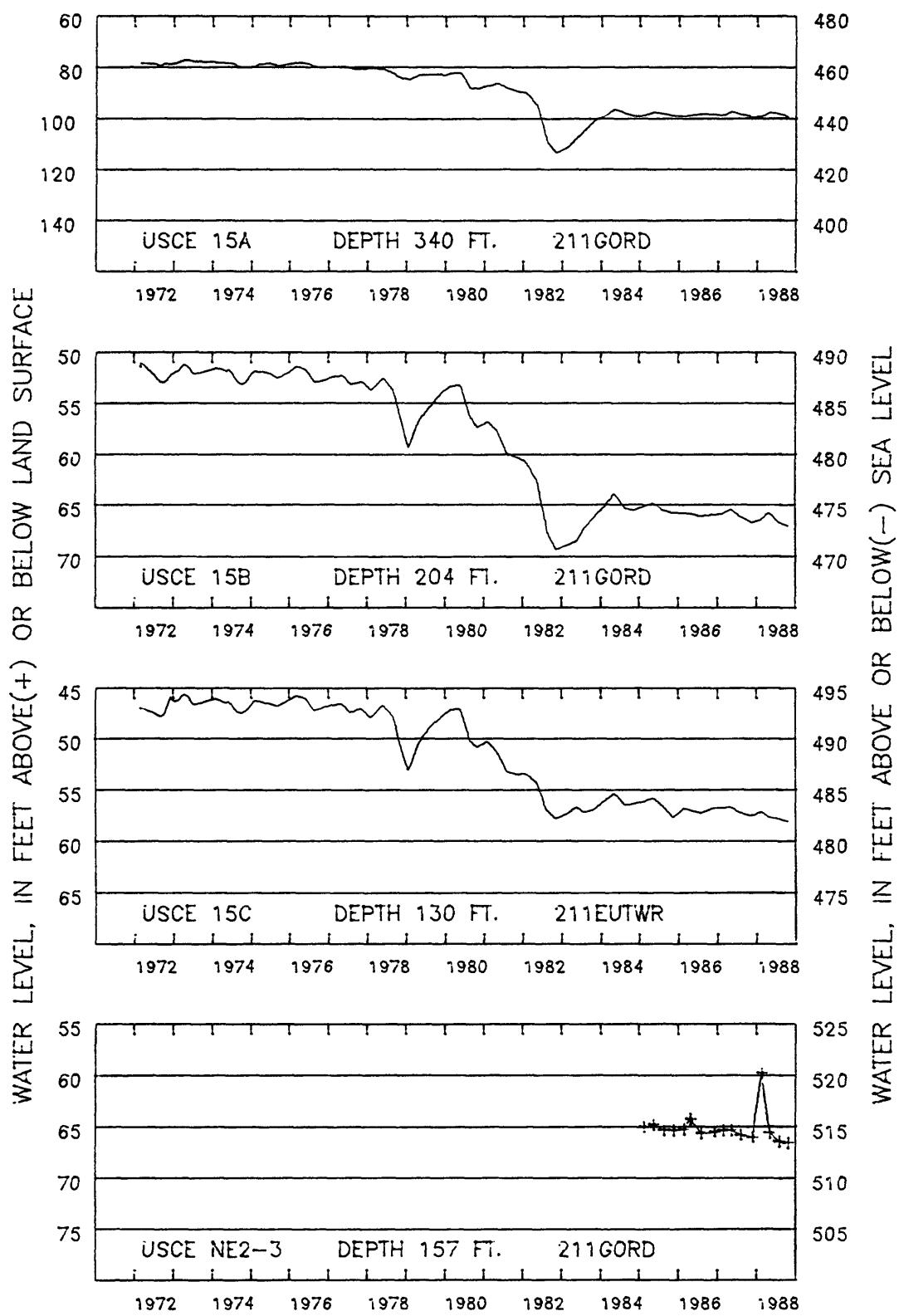
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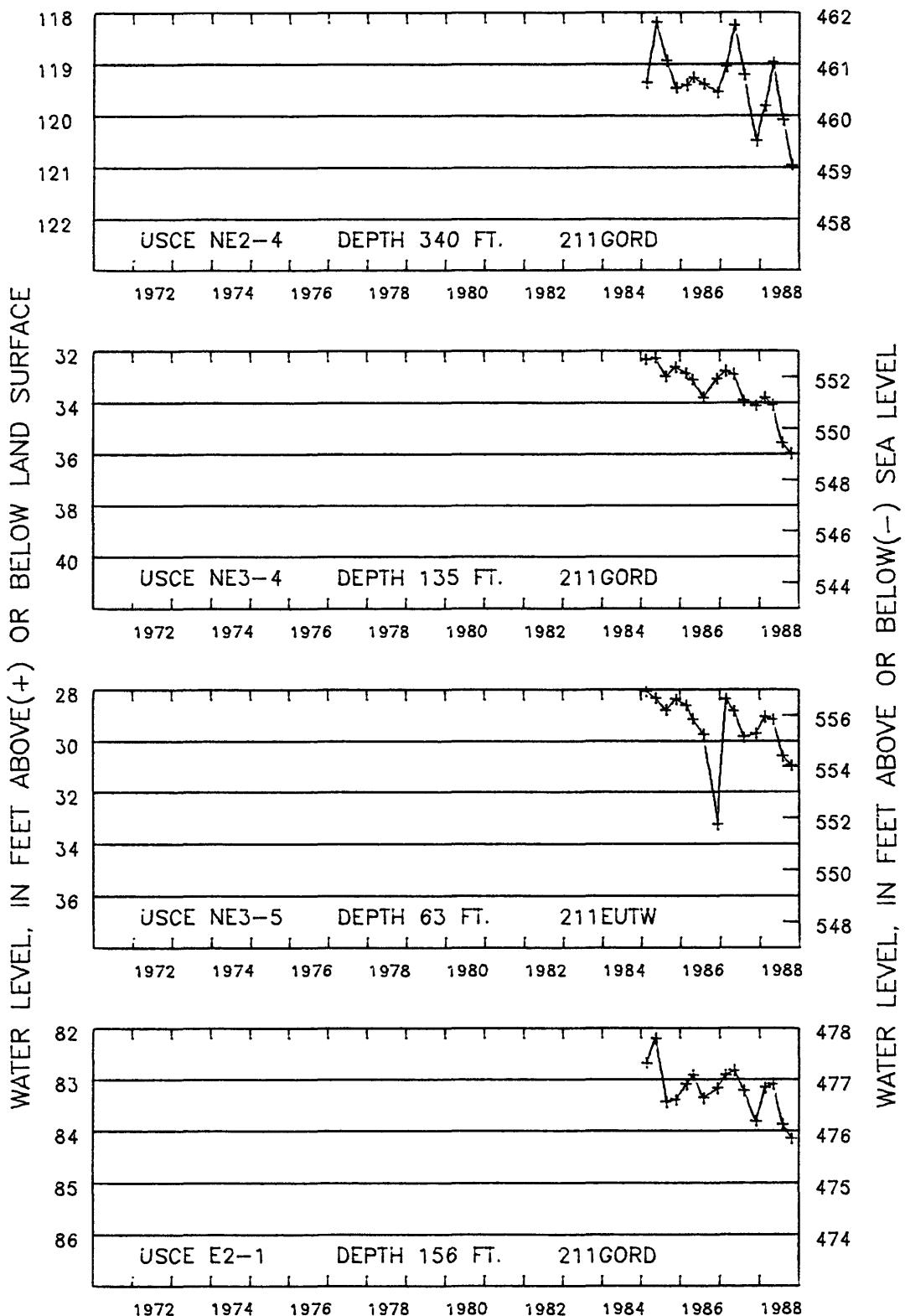
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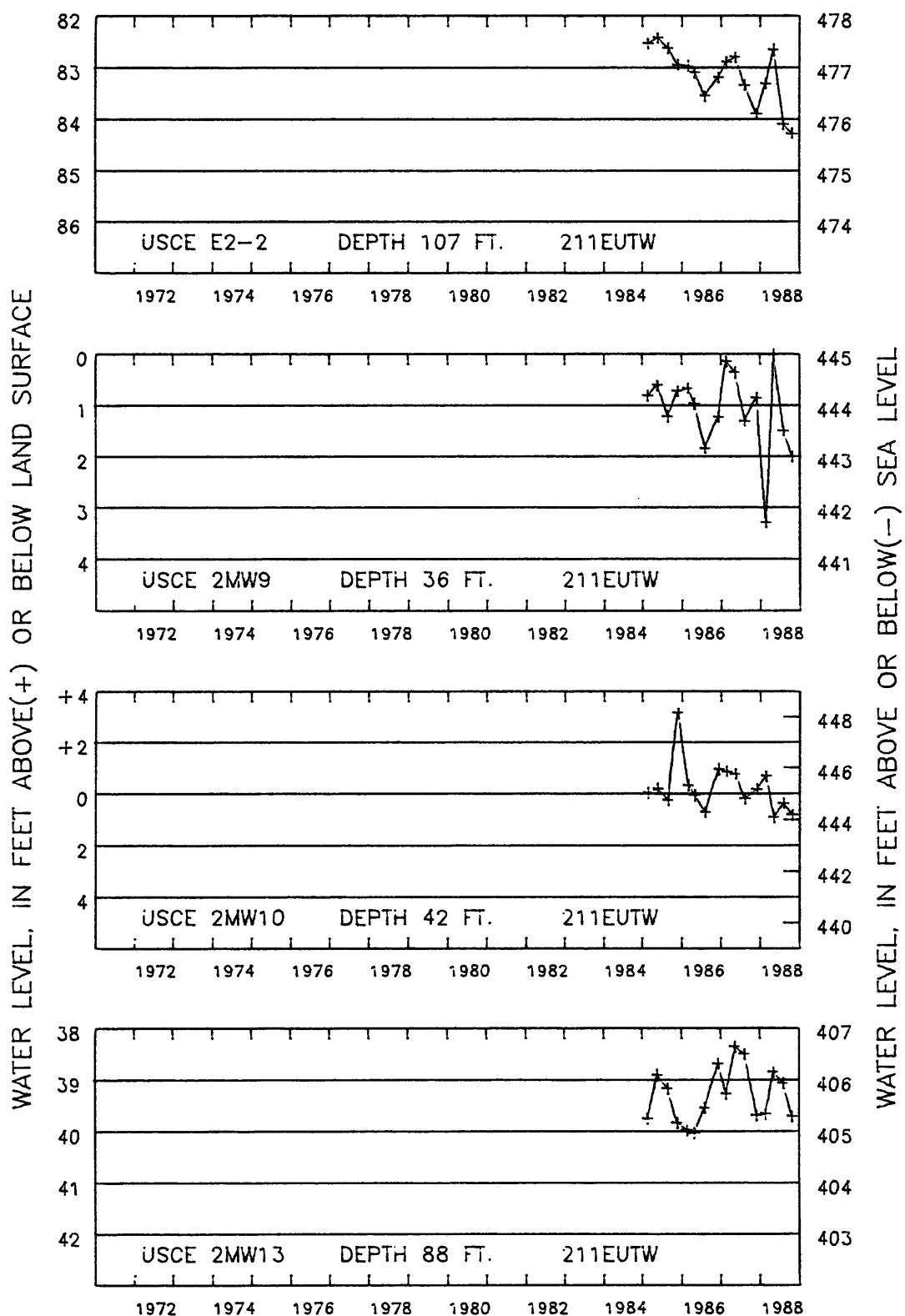
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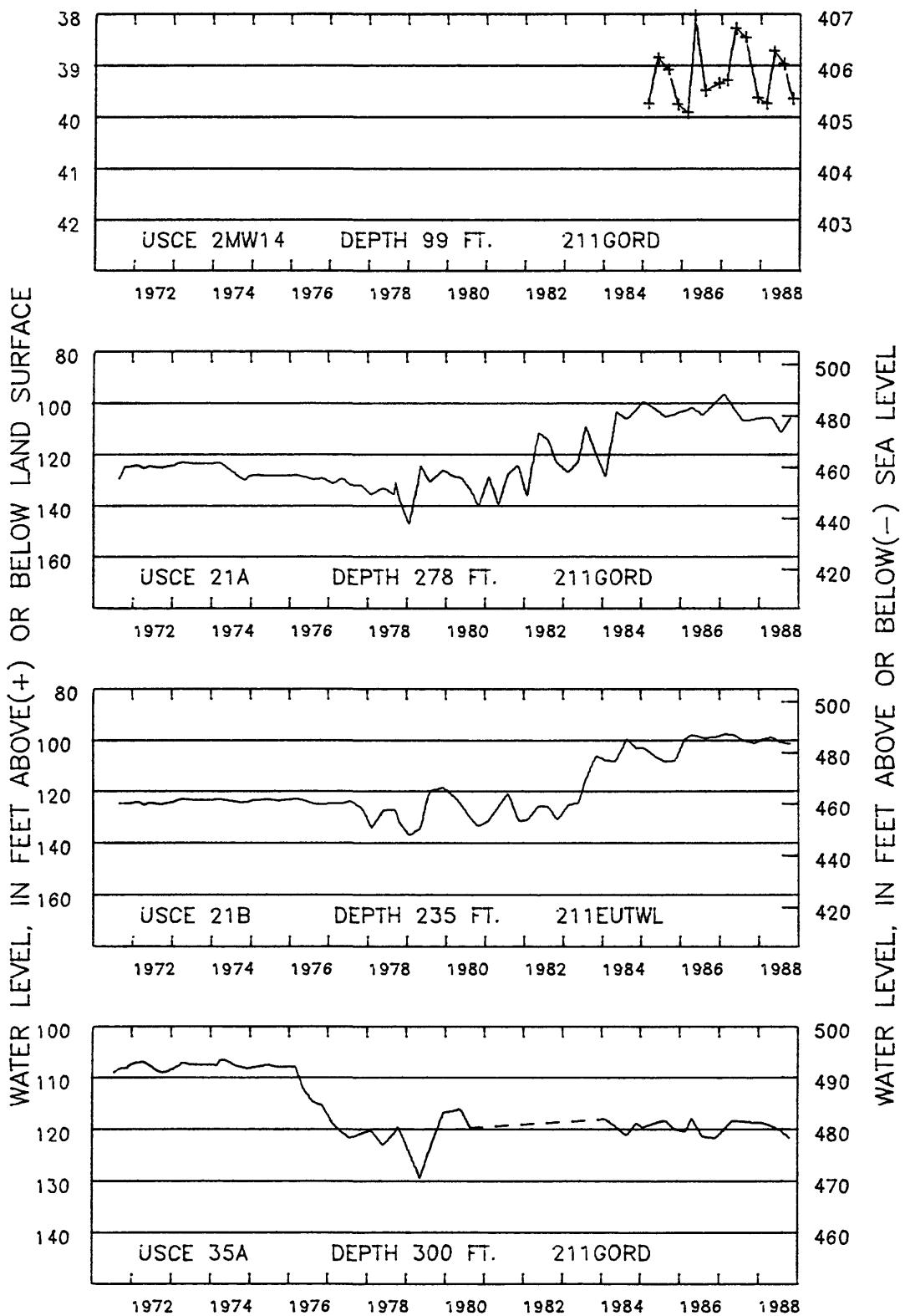
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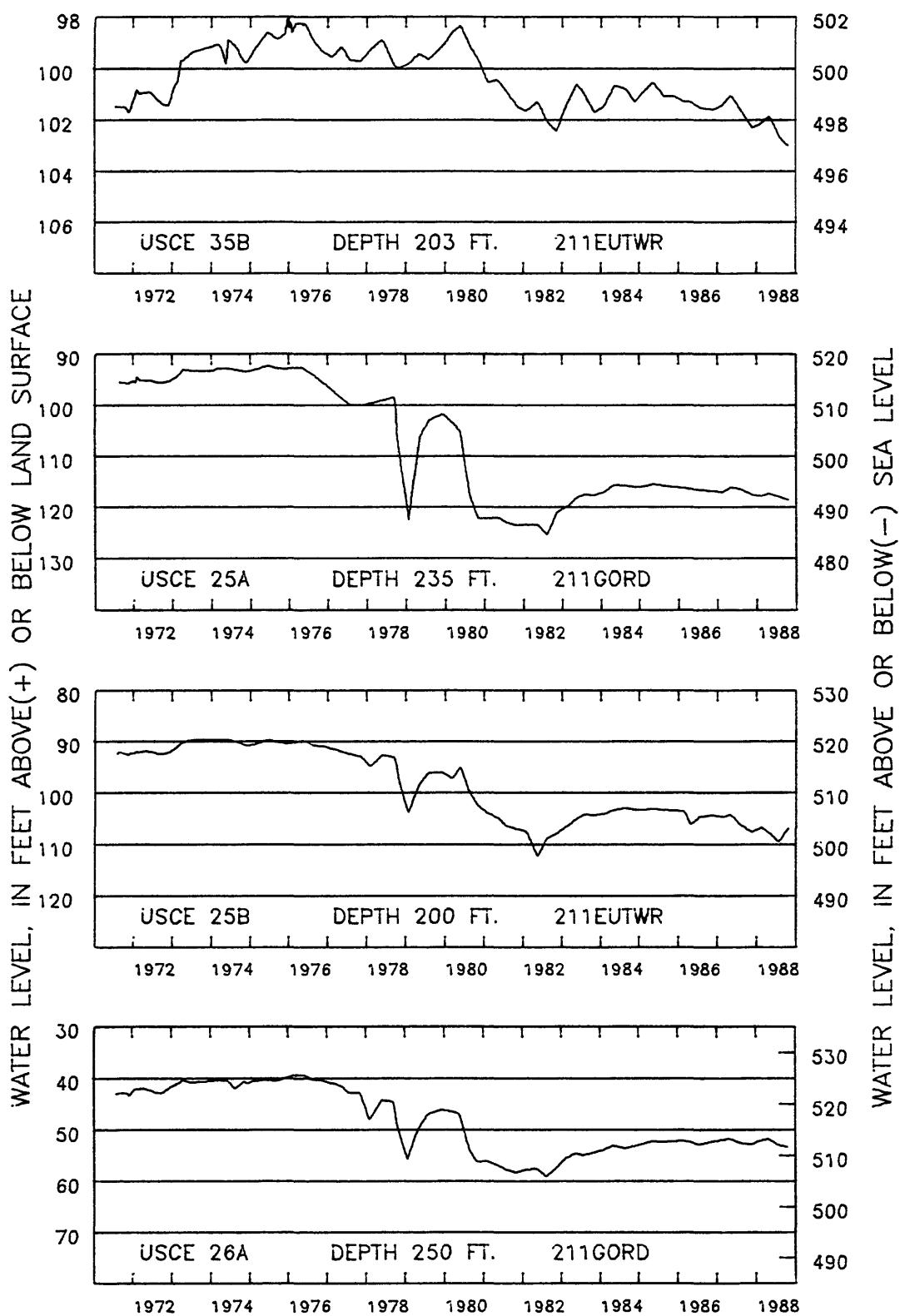
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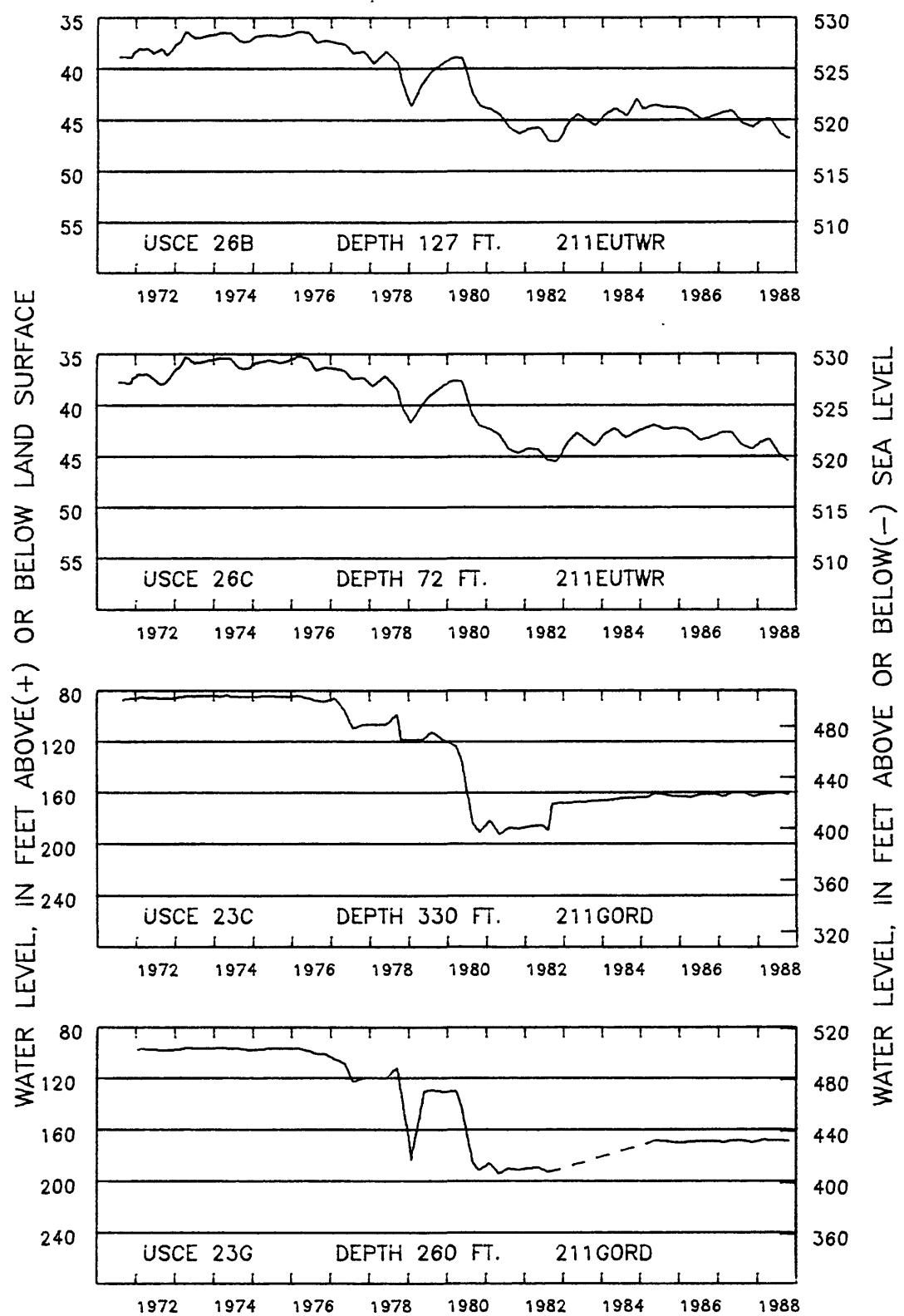
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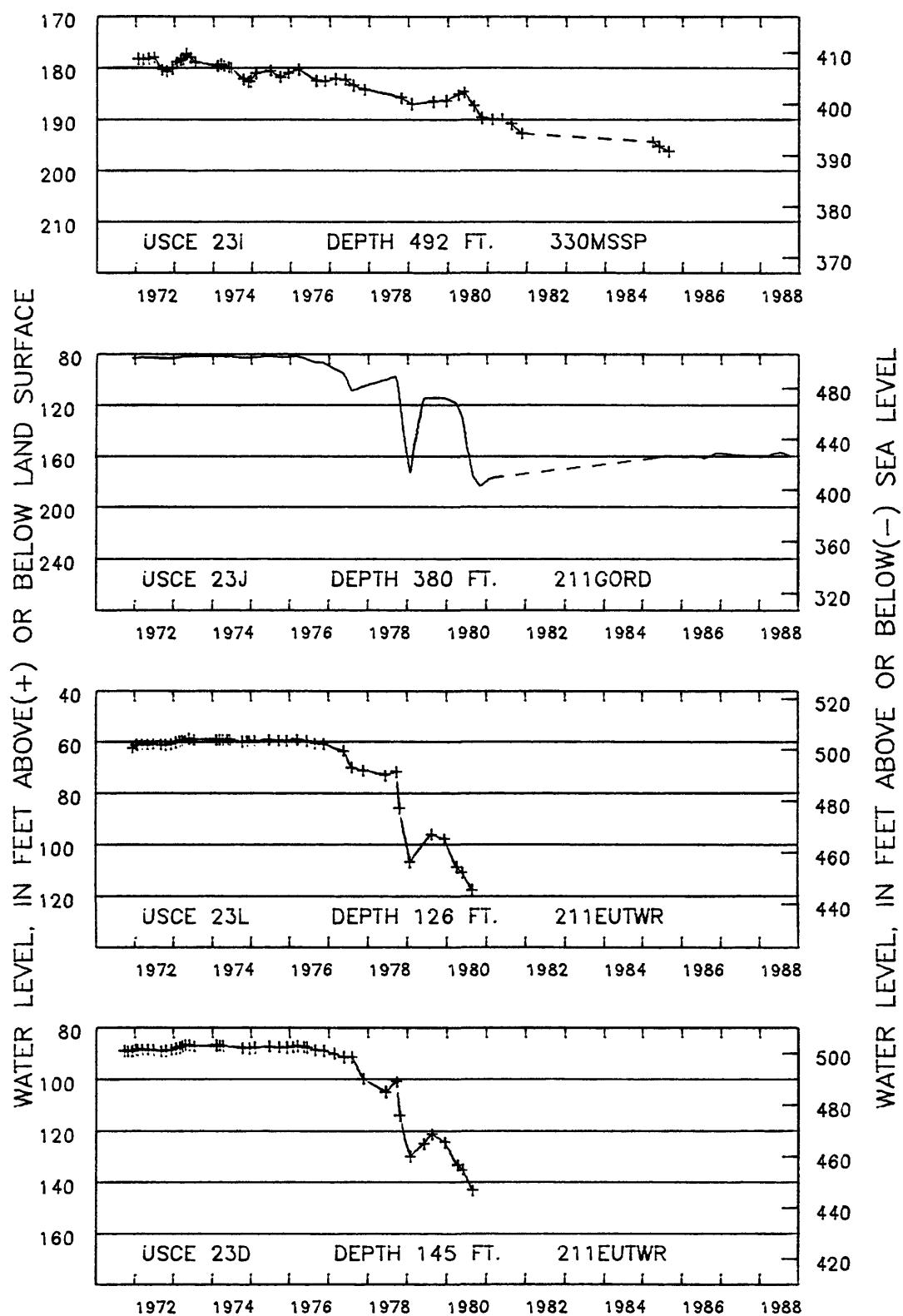
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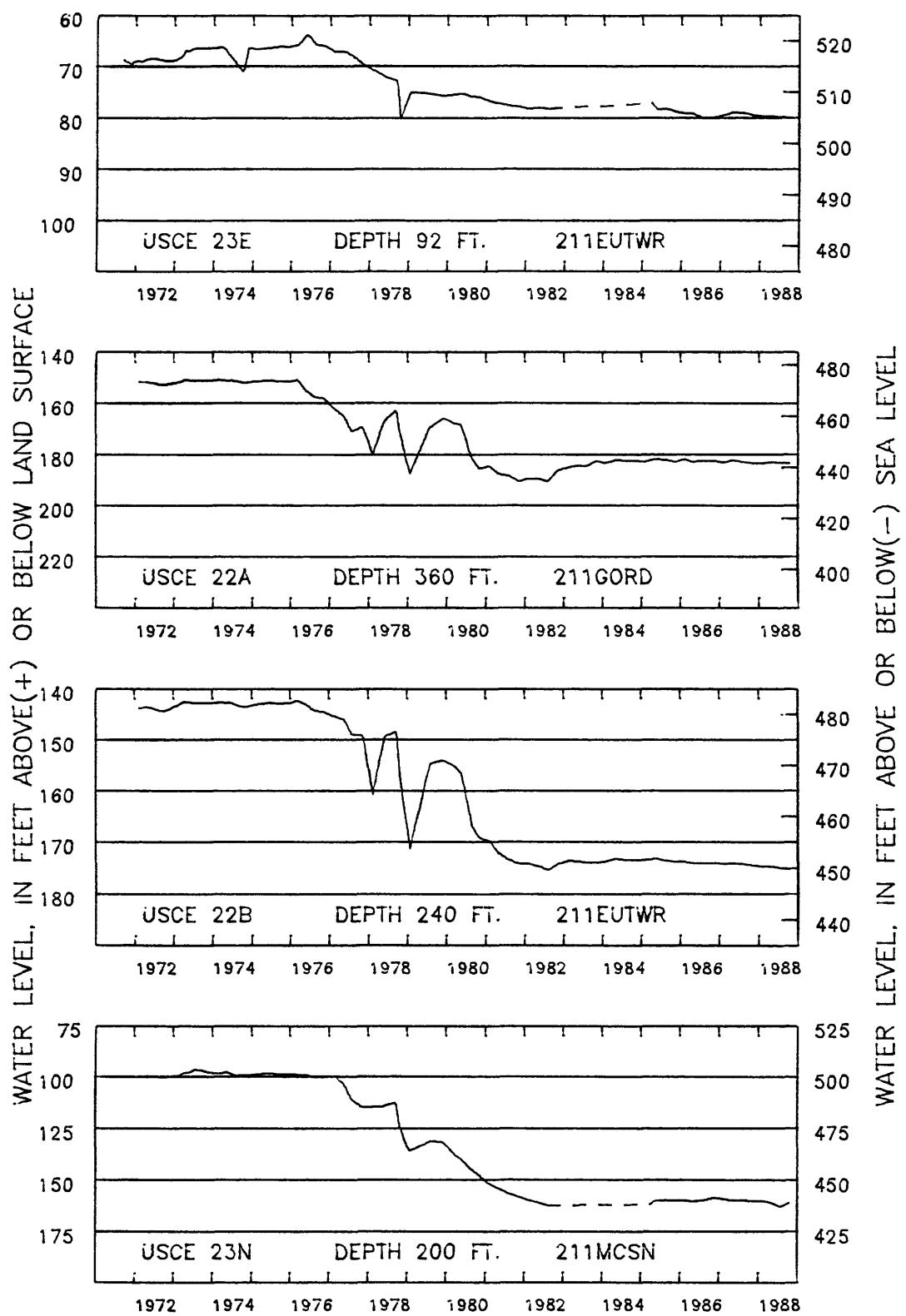
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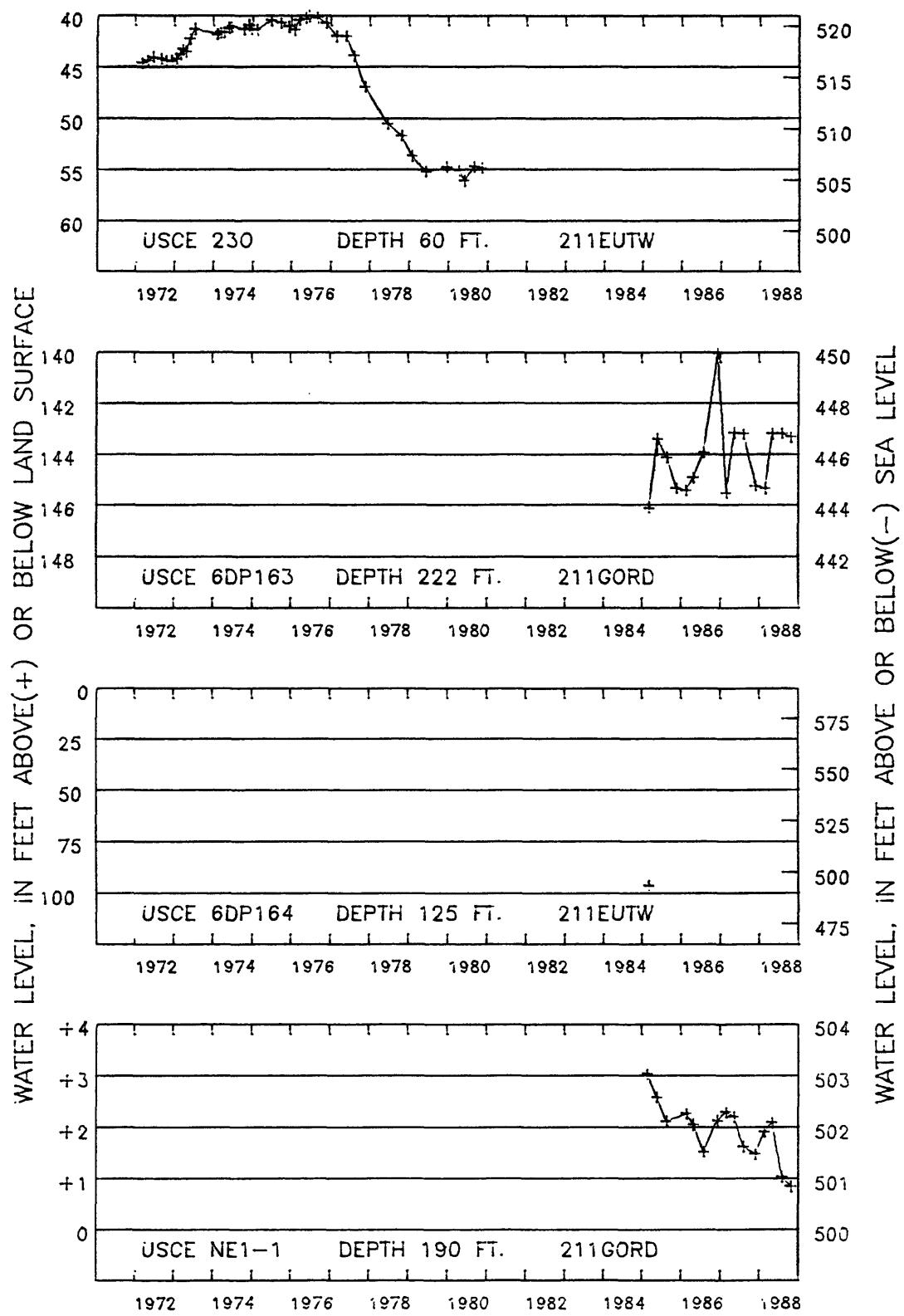
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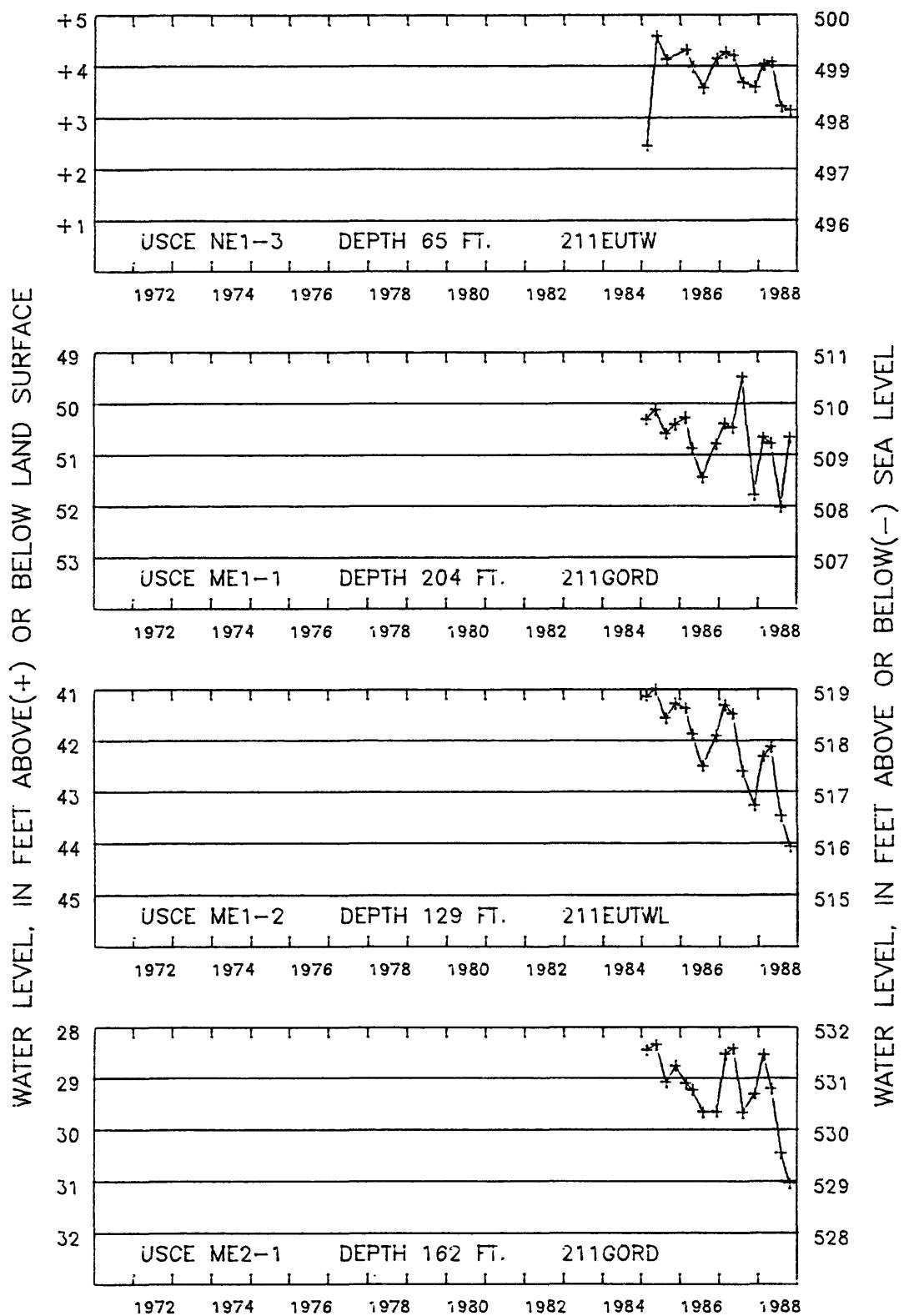
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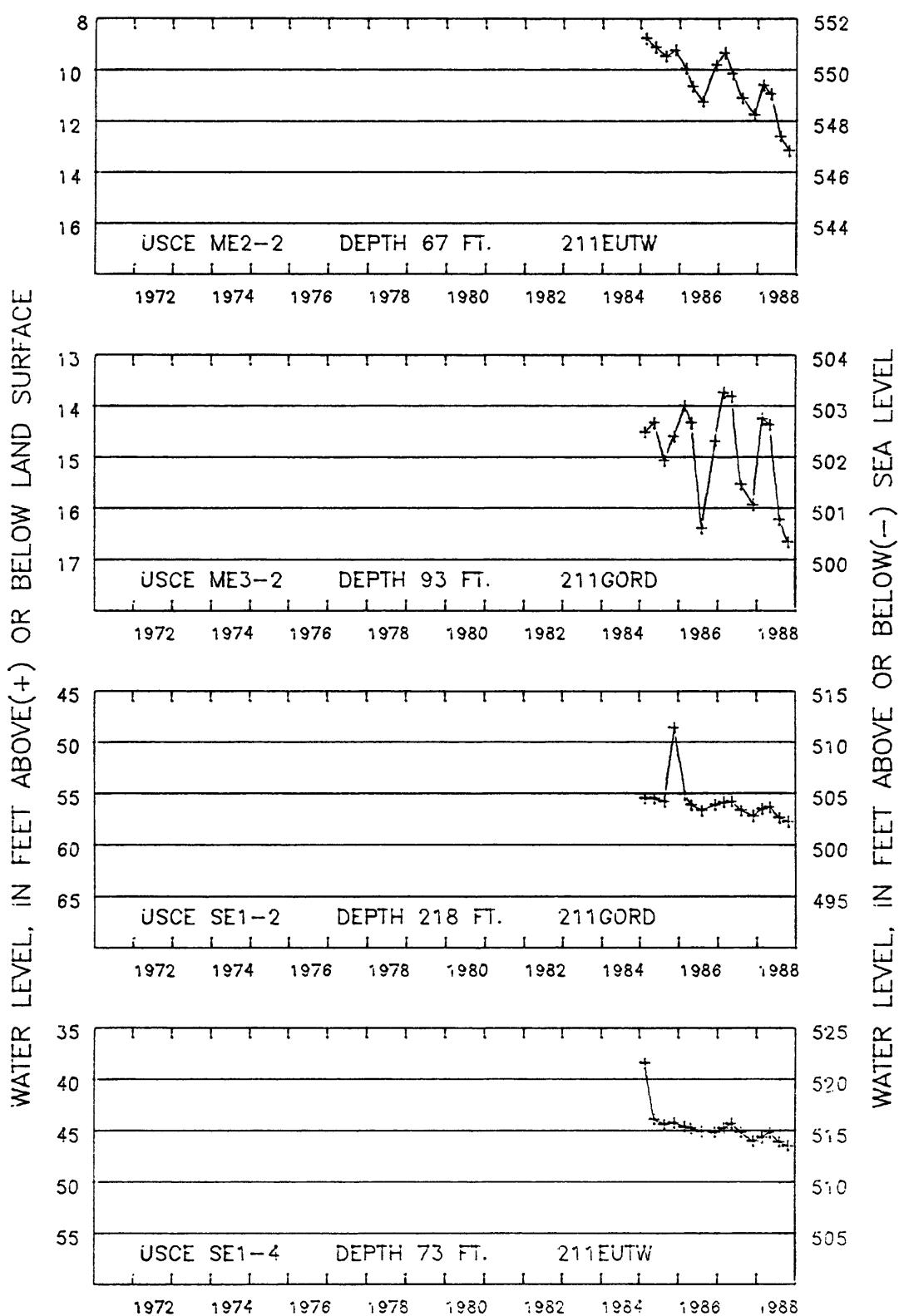
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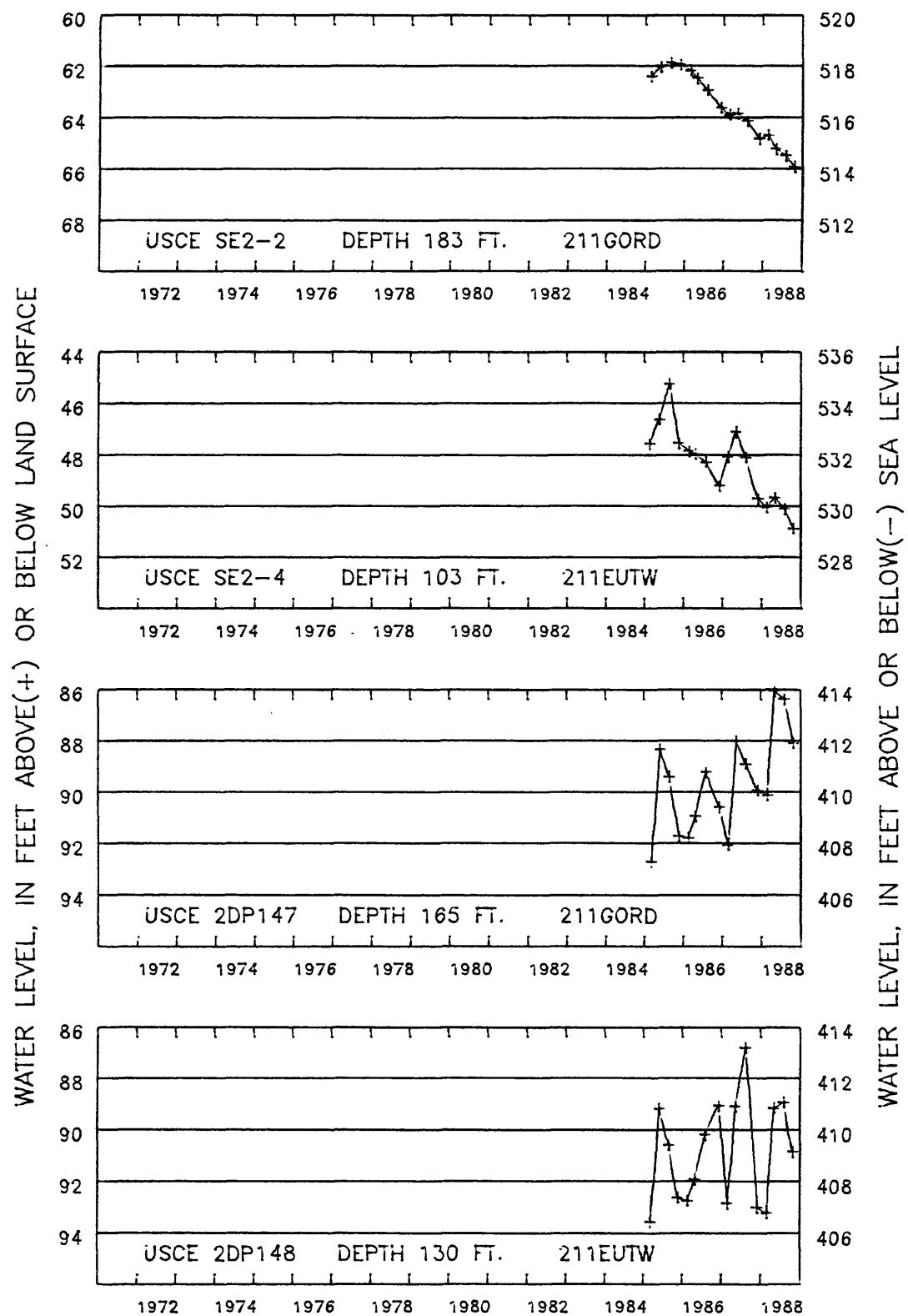
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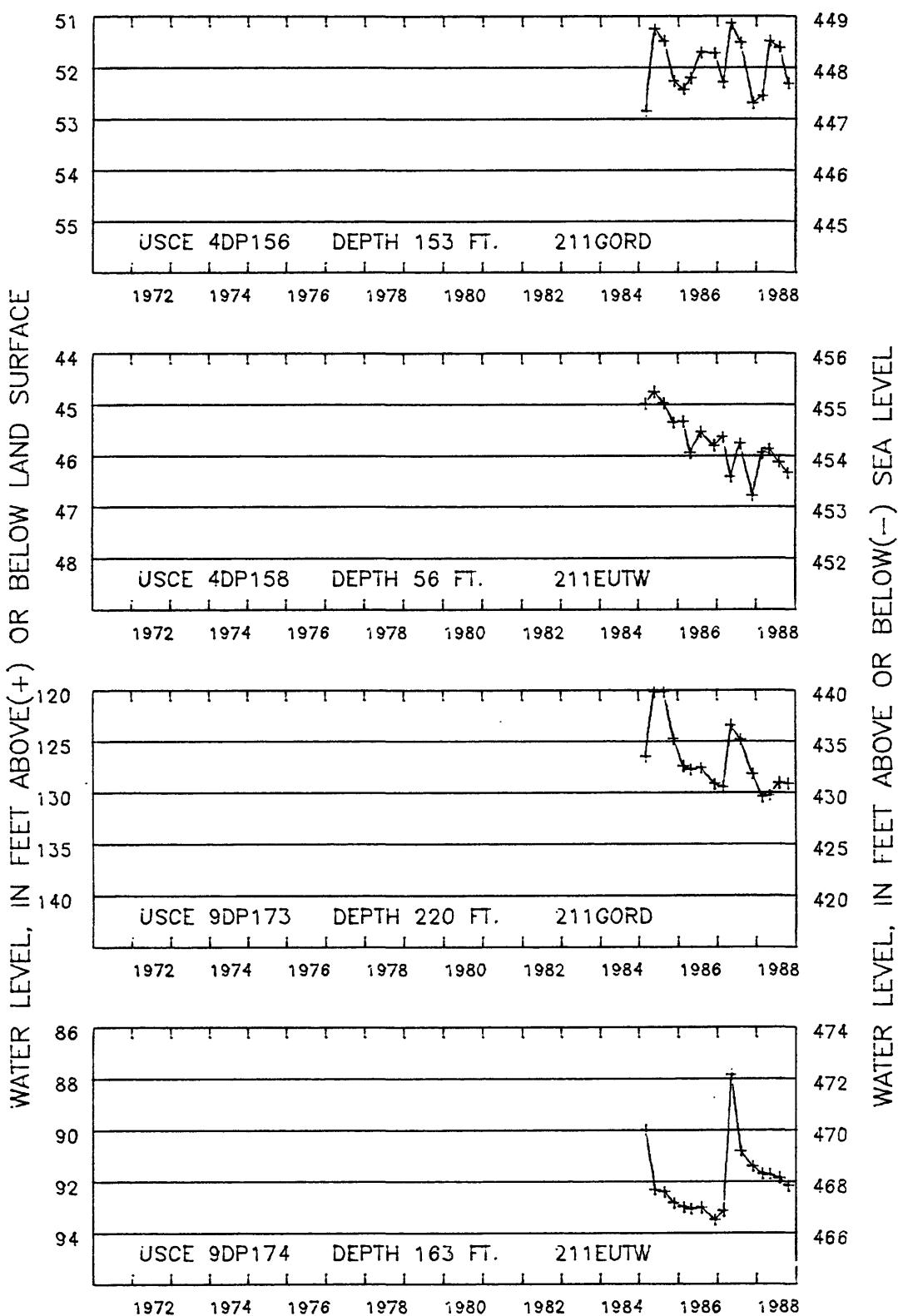
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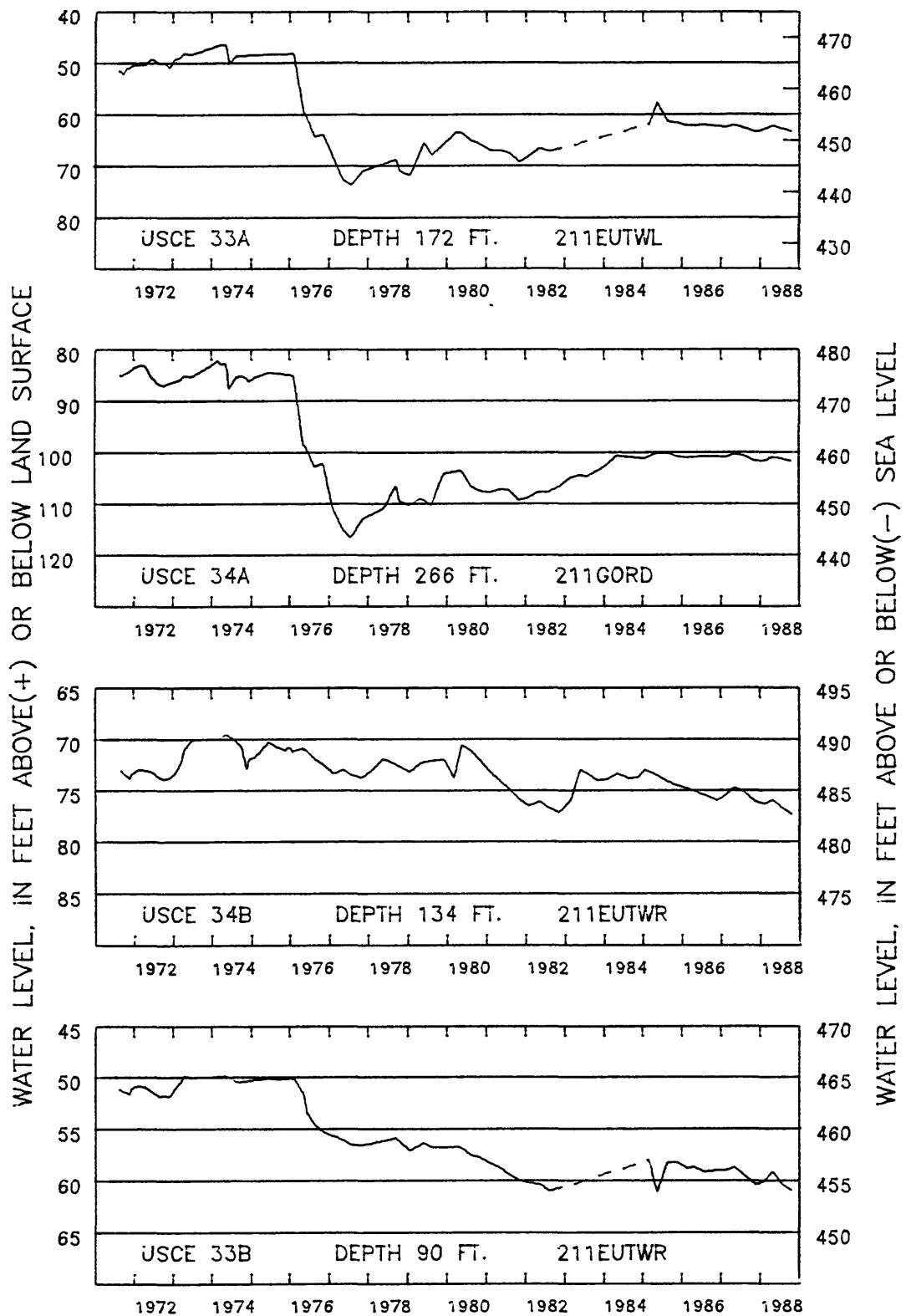
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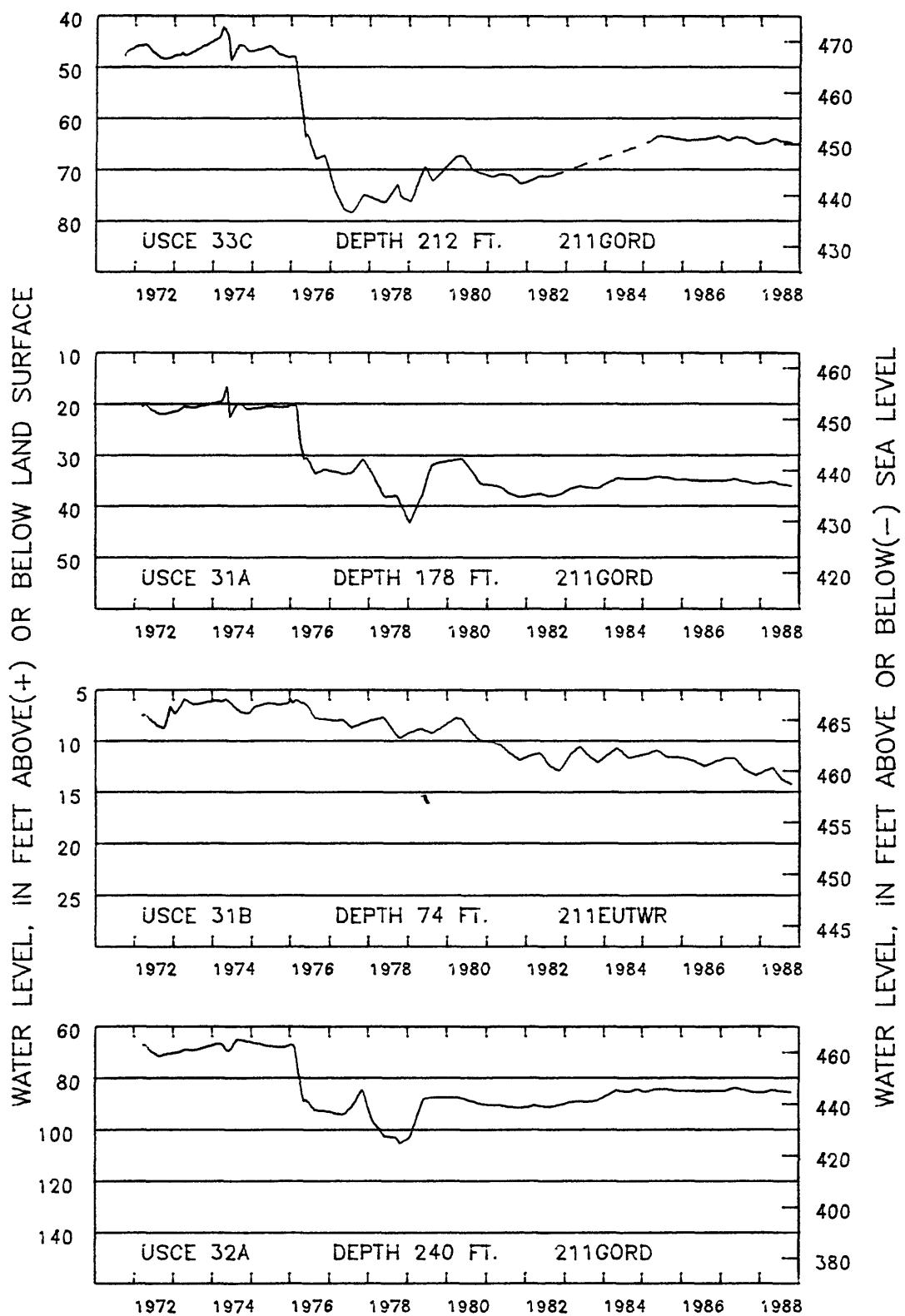
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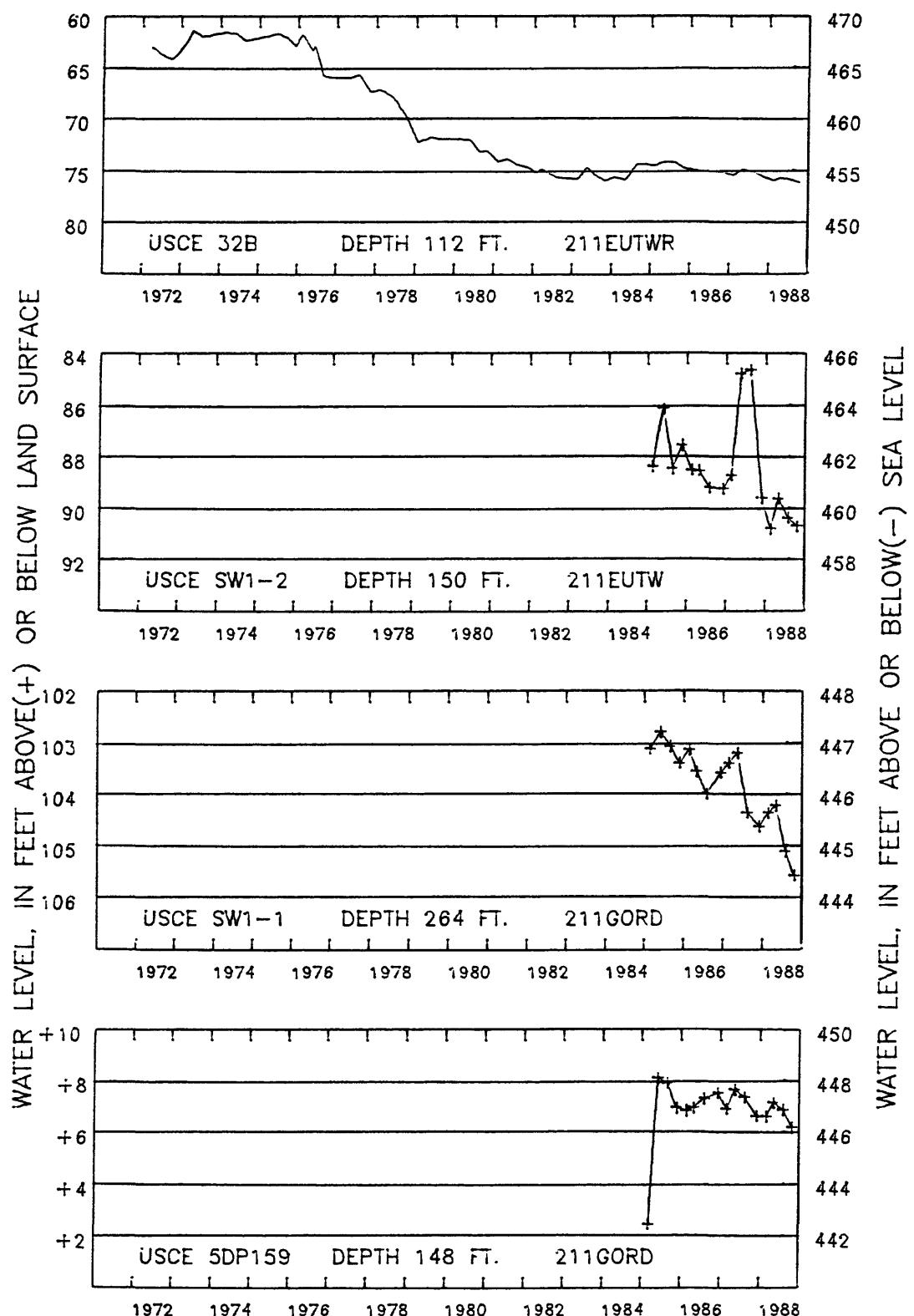
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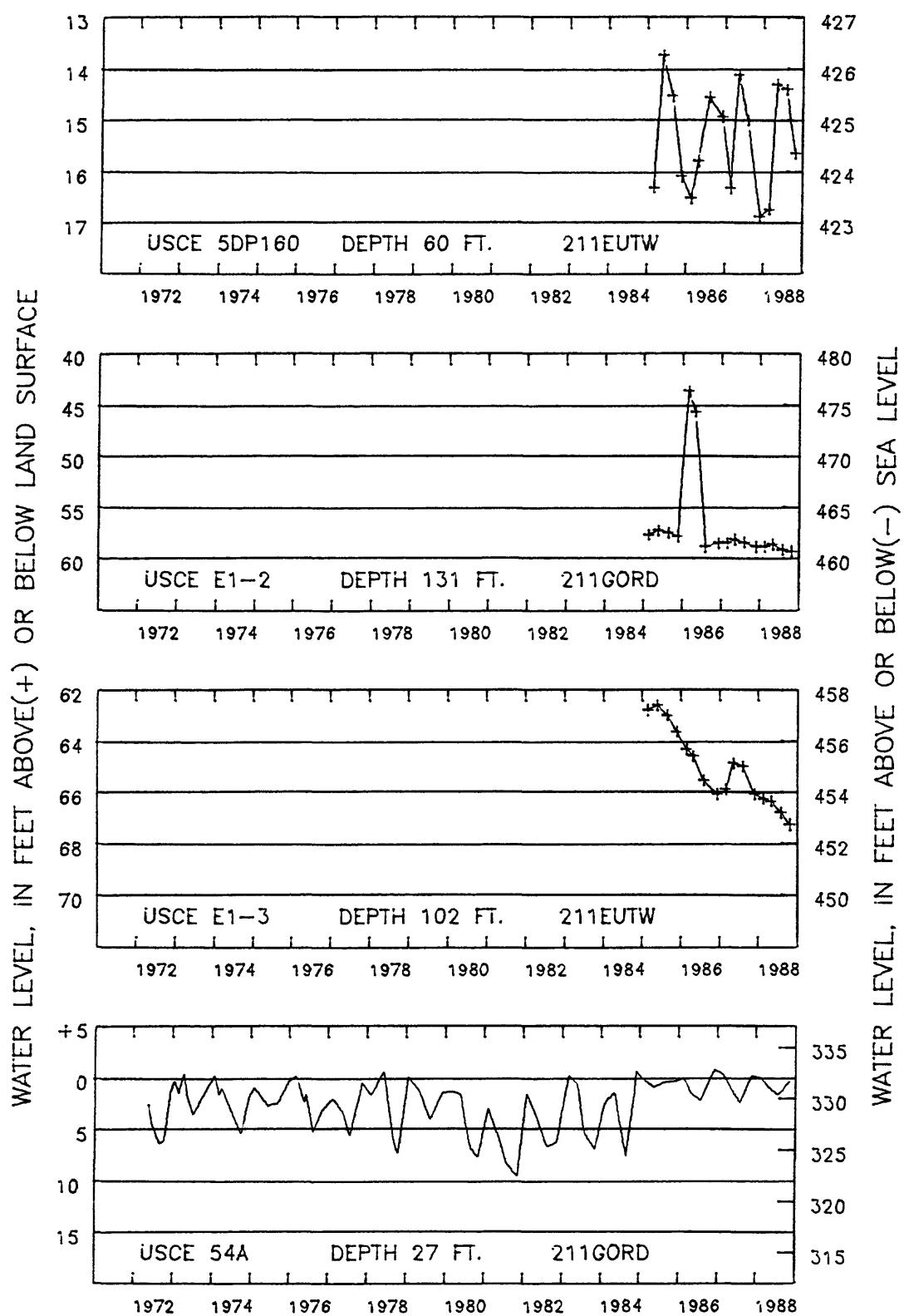
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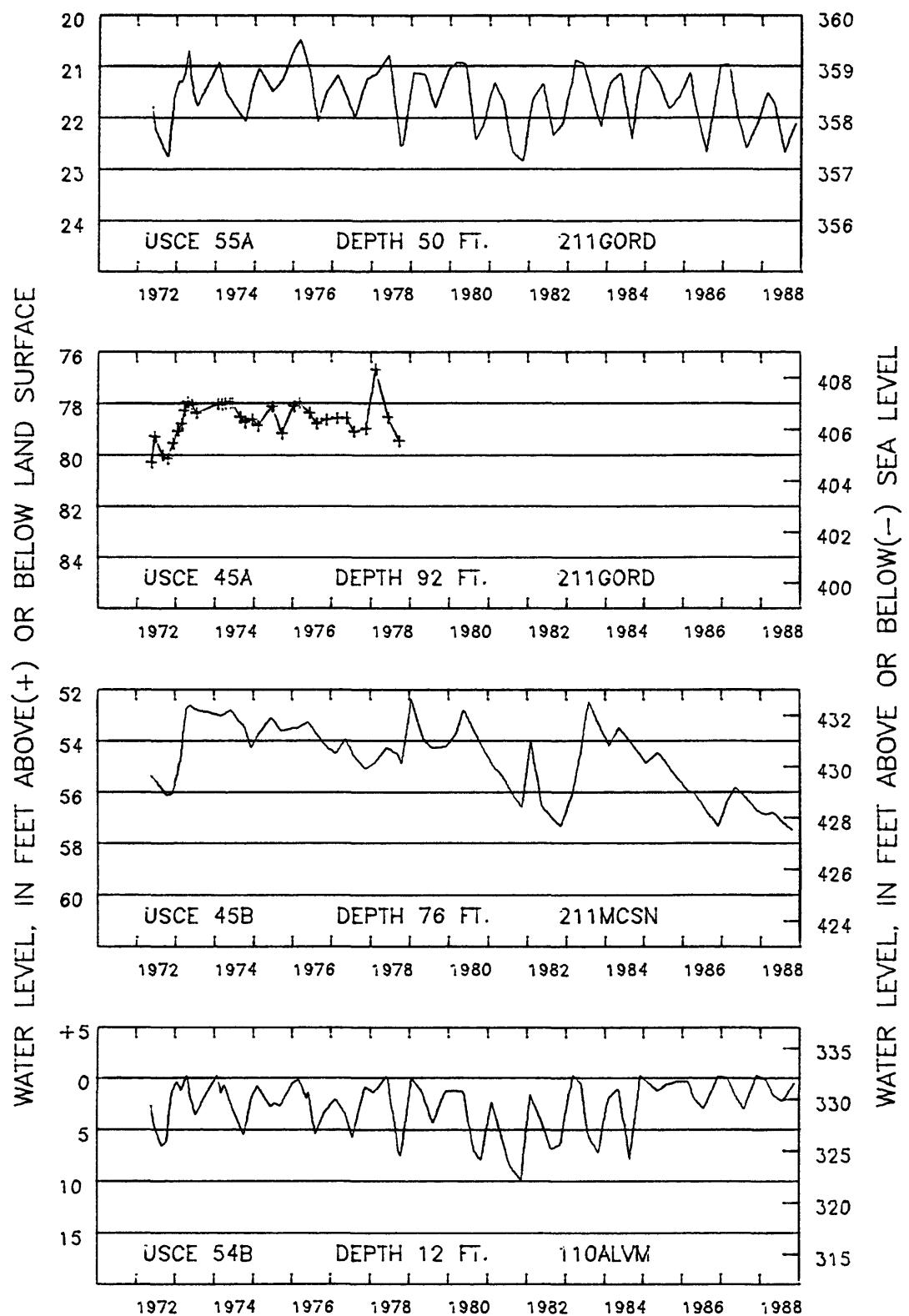
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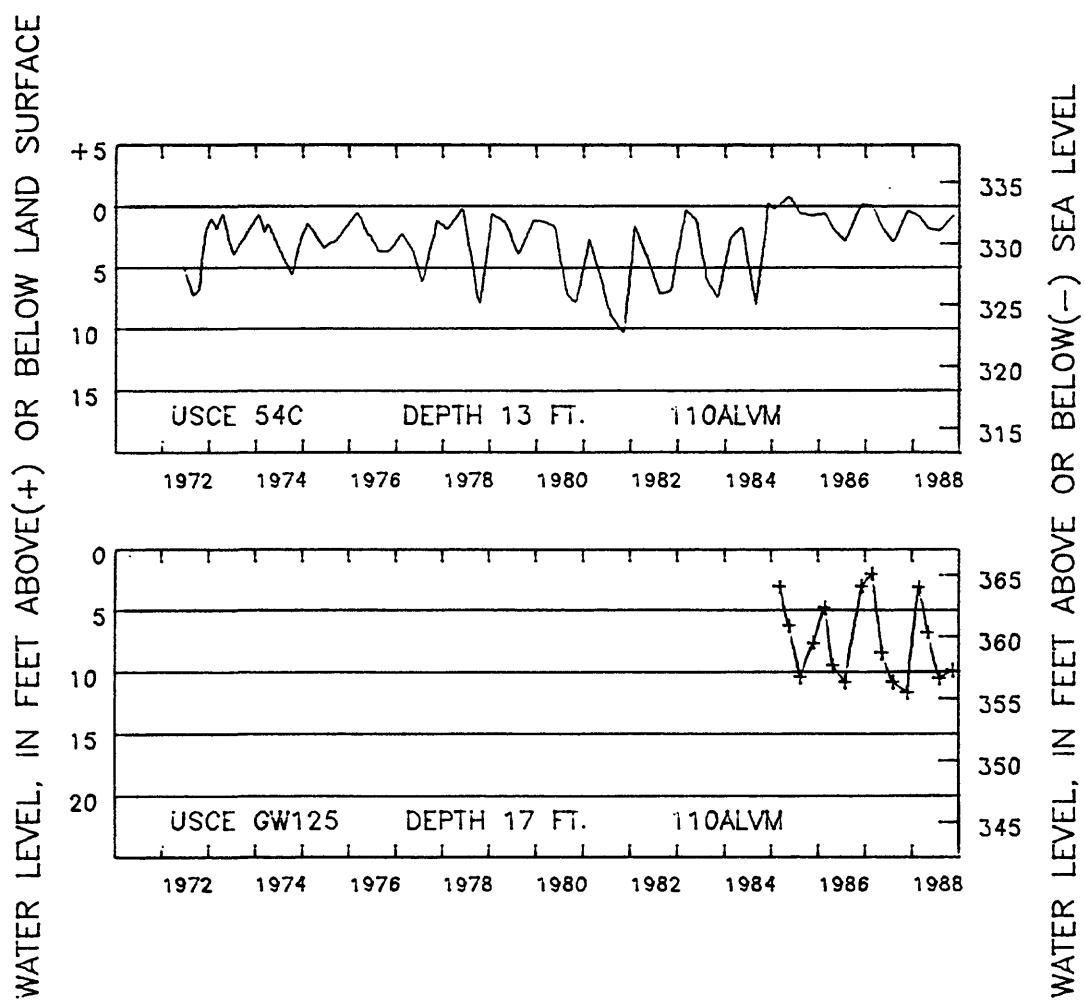
HYDROGRAPHS OF TENNESSEE-TOMBIGEE OBSERVATION WELLS



HYDROGRAPHS OF TENNESSEE-TOMBIGEE OBSERVATION WELLS



HYDROGRAPHS OF TENNESSEE-TOMBIGEE OBSERVATION WELLS



HYDROGRAPHS OF TENNESSEE-TOMBIGBEE OBSERVATION WELLS

APPENDIX B

SURFACE-WATER DATA

APPENDIX B

SURFACE-WATER DATA

DESCRIPTIONS OF SITES

DESCRIPTIONS OF SURFACE-WATER SITES

STATION NUMBER	STATION NAME	LATITUDE	LONGITUDE	SEQ. NO.	HYDRO-LOGIC UNIT CODE	DRAIN-AGE AREA (SQ. MI.)
SURFACE-WATER NETWORK						
03592824	TENNESSEE-TOMBIGBEE WATERWAY AT CROSS ROADS, MS	34 54 51	088 14 48	00	06030005	
343140088192235	TTW BAY SPRINGS LAKE NAVIGATION MILE 412.3	34 31 40	088 19 22	35	03160101	
02430005	TENN-TOM WATERWAY BELOW BAY SPRINGS LOCK AND DAM, MS	34 31 24	088 19 27	35	03160101	
342201088242935	TTW LOCK "D" POOL SEDIMENTATION RANGE 1AD	34 22 01	088 24 29	35	03160101	
340103088285435	TTW LOCK "A" POOL SEDIMENTATION RANGE 1AA	34 01 03	088 28 54	35	03160101	
02430100	MACKEYS CREEK NEAR MOORES MILL, MS	34 29 13	088 20 44	00	03160101	118
02436500	TOWN CREEK NEAR NETTLETON, MS	34 03 32	088 37 40	00	03160102	620
02437000	TOMBIGBEE RIVER NEAR AMORY, MS	33 59 07	088 33 03	00	03160101	1930
335008088311335	TTW ABERDEEN LAKE SEDIMENTATION RANGE 1A	33 50 08	088 31 13	35	03160101	
02437101	TOMBIGBEE RIVER BELOW ABERDEEN LOCK AND DAM, MS	33 49 29	088 31 16	35	03160101	2050
334219088281935	TTW COLUMBUS LAKE MCKINLEY CREEK BEND SR 50A	33 42 19	088 28 19	35	03160101	
333927088304935	TTW COLUMBUS LAKE BUTTAHATCHEE RIVER BEND SR 26A	33 39 27	088 30 49	35	03160101	
02439600	BUTTAHATCHEE RIVER NEAR KOLOLA SPRINGS, MS	33 40 24	088 25 45	00	03160103	855
02441000	TIBBEE CREEK NEAR TIBBEE, MS	33 32 17	088 38 00	00	03160104	926
333119088291435	TTW COLUMBUS LAKE SEDIMENTATION RANGE 1A	33 31 19	088 29 14	35	03160101	
02441391	TOMBIGBEE RIVER BELOW COLUMBUS LOCK AND DAM, MS	33 31 04	088 29 22	35	03160101	4440
02441498	TOMBIGBEE RIVER COLUMBUS BEND SR 11B AT COLUMBUS, MS	33 26 06	088 29 38	35	03160101	
02443500	LUXAPALLILA CREEK NEAR COLUMBUS, MS	33 30 50	088 23 42	00	03160105	715
02443610	TOMBIGBEE RIVER PRATT CAMP SR 5HB BELOW COLUMBUS, MS	33 20 30	088 23 40	00	03160106	
02444158	TOMBIGBEE RIVER ABOVE BEVILL LOCK AND DAM, AL	33 13 08	088 17 10		03160106	
02444161	TOMBIGBEE RIVER BELOW BEVILL LOCK AND DAM, AL	33 12 37	088 17 19		03160106	5750
02444210	TOMBIGBEE RIVER BIG CREEK BEND NEAR PICKENSVILLE, AL	33 11 11	088 16 03		03160106	
02447010	TOMBIGBEE RIVER COOKS BEND NEAR WARSAW, AL	32 57 38	088 11 14		03160106	
02447020	TOMBIGBEE RIVER ABOVE GAINESVILLE LOCK AND DAM, AL	32 51 38	088 09 25		03160106	
02449000	TOMBIGBEE RIVER AT GAINESVILLE, AL	32 49 30	088 09 24	00	03160106	8630
02466998	TOMBIGBEE RIVER ABOVE DEMOPOLIS LOCK AND DAM, AL	32 30 55	087 51 27		03160201	

SITES NOT IN THE SURFACE-WATER NETWORK

02448000	NOXUBEE RIVER AT MACON, MS	33 06 08	088 33 40	00	03160108	768
02469762	TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL	31 45 30	088 07 35		03160203	18400

APPENDIX B

SURFACE-WATER DATA

WATER-QUALITY FIELD DETERMINATIONS AND ANALYSES

SURFACE-WATER SITES

03592824 TENNESSEE-TOMBIGBEE WATERWAY AT CROSS ROADS, MS

DATE	TIME	SAM-	SPE-	TRANS-	OXYGEN,	
		PLING	CIFIC	PAR-	DIS-	
		DEPTH	GAGE	CON-	ENCY	SOLVED
		(FEET)	(FEET)	(US/CM)	(SECCHI)	(PER-
				(STAND-	DISK)	CENT
				ARD	(IN)	SATUR-
				UNITS)		ATION)
APR						
11...	1000	--	13.76	--	--	--
11...	1001	1.00	--	148	7.70	17.5
11...	1002	5.00	--	148	7.70	17.5
11...	1003	10.0	--	148	7.70	17.5
11...	1004	15.0	--	148	7.70	17.5
11...	1005	19.0	--	147	7.70	17.5
JUN						
27...	1000	--	13.26	--	--	45.8
27...	1001	1.00	--	177	8.10	29.5
27...	1002	5.00	--	177	8.20	29.5
27...	1003	10.0	--	177	8.20	29.5
27...	1004	15.0	--	178	8.20	29.5
27...	1005	16.0	--	178	8.20	29.5

343140088192235 TTW BAY SPRINGS LAKE NAVIGATION MILE 412.3

DATE	TIME	SAM-	SPE-	TRANS-	OXYGEN,	
		PLING	CIFIC	PAR-	DIS-	
		DEPTH	GAGE	CON-	ENCY	SOLVED
		(FEET)	(FEET)	(US/CM)	(SECCHI)	(PER-
				(STAND-	DISK)	CENT
				ARD	(IN)	SATUR-
				UNITS)		ATION)
APR						
11...	1230	--	--	--	--	--
11...	1231	1.00	114	7.80	17.0	120
11...	1232	5.00	114	7.80	17.0	--
11...	1233	10.0	114	7.80	17.0	--
11...	1234	15.0	112	7.80	17.0	--
11...	1235	20.0	112	7.80	17.0	--
11...	1236	25.0	112	7.80	17.0	--
11...	1237	30.0	115	7.70	17.0	--
11...	1238	35.0	116	7.70	16.0	--
11...	1239	40.0	122	7.70	15.0	--
11...	1240	45.0	119	7.80	13.0	--
11...	1241	50.0	120	7.80	12.0	--
11...	1242	55.0	119	7.80	11.5	--
11...	1243	60.0	119	7.90	11.0	--
11...	1244	65.0	118	7.90	11.0	--
11...	1245	70.0	118	7.80	11.0	--
11...	1246	75.0	118	7.70	11.0	--
11...	1247	80.0	117	7.60	11.0	--
11...	1248	85.0	120	7.70	11.0	--
JUN						
27...	1300	--	--	--	--	156
27...	1301	1.00	140	6.10	30.5	--
27...	1302	5.00	140	6.10	30.0	--
27...	1303	10.0	140	6.00	30.0	--
27...	1304	15.0	140	5.70	29.5	--
27...	1305	20.0	141	5.80	29.5	--
27...	1306	25.0	137	5.20	27.0	--
27...	1307	30.0	138	5.00	23.0	--
27...	1308	35.0	138	5.00	20.0	--
27...	1309	40.0	140	5.10	16.5	--
27...	1310	45.0	141	5.00	15.5	--
27...	1311	50.0	132	5.20	14.5	--
27...	1312	55.0	136	5.80	13.5	--
27...	1313	60.0	143	6.90	12.5	--
27...	1314	65.0	148	6.90	12.5	--
27...	1315	70.0	152	7.00	12.0	--

SURFACE-WATER SITES--Continued

02430005 TENN-TOM WATERWAY BELOW BAY SPRINGS LOCK AND DAM, MS

DATE	TIME	SAM-	STREAM-	SPE-	TRANS-			OXYGEN,
		PLING	FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	INSTAN-	DUCT-	(STAND-	ATURE	ENCY	SOLVED
		(FEET)	TANEous	(US/CM)	ARD	WATER	(SECCHI	(MG/L)
					UNITS)	(DEG C)	DISK)	
APR								
11...	1500	--	0.0	--	--	--	96.0	--
11...	1501	1.00	--	115	7.90	16.5	--	11.9
11...	1502	5.00	--	114	7.90	16.5	--	11.9
11...	1503	10.0	--	115	7.90	16.5	--	12.0
11...	1504	15.0	--	115	7.90	16.5	--	11.9
JUN								
27...	1700	--	0.0	--	--	--	96.0	--
27...	1701	1.00	--	130	7.30	29.0	--	7.1
27...	1702	5.00	--	130	7.30	29.0	--	6.9
27...	1703	10.0	--	130	7.20	29.0	--	7.1
27...	1704	12.0	--	130	7.20	29.0	--	7.1

342201088242935 TTW LOCK "D" POOL SEDIMENTATION RANGE 1AD

DATE	TIME	SAM-	STREAM-	SPE-	TRANS-			OXYGEN,
		PLING	FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	INSTAN-	DUCT-	(STAND-	ATURE	ENCY	SOLVED
		(FEET)	TANEous	(US/CM)	ARD	WATER	(SECCHI	(MG/L)
					UNITS)	(DEG C)	DISK)	
APR								
11...	1615	--	--	--	--	--	108	--
11...	1616	1.00	90	7.80	17.5	--	12.4	133
11...	1617	5.00	89	7.80	17.5	--	12.0	129
11...	1618	10.0	88	7.80	17.5	--	11.8	127
11...	1619	15.0	88	7.80	17.5	--	11.7	126
JUN								
27...	1830	--	--	--	--	--	84.0	--
27...	1831	1.00	118	7.10	30.5	--	6.8	93
27...	1832	5.00	118	7.10	31.0	--	6.7	92
27...	1833	10.0	115	7.00	30.5	--	6.4	87
27...	1834	15.0	112	6.90	30.5	--	6.0	82

340103088285435 TTW LOCK "A" POOL SEDIMENTATION RANGE 1AA

DATE	TIME	SAM-	STREAM-	SPE-	TRANS-			OXYGEN,
		PLING	FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	INSTAN-	DUCT-	(STAND-	ATURE	ENCY	SOLVED
		(FEET)	TANEous	(US/CM)	ARD	WATER	(SECCHI	(MG/L)
					UNITS)	(DEG C)	DISK)	
APR								
12...	1000	--	--	--	--	--	20.0	--
12...	1001	1.00	40	7.70	17.5	--	10.4	111
12...	1002	5.00	40	7.60	17.5	--	10.3	110
12...	1003	10.0	40	7.60	17.5	--	10.2	109
12...	1004	13.0	39	7.50	17.5	--	10.1	108
JUN								
28...	1100	--	--	--	--	--	30.0	--
28...	1101	1.00	82	6.60	30.0	--	7.3	98
28...	1102	5.00	82	6.70	30.0	--	7.1	95
28...	1103	10.0	82	6.80	29.5	--	7.0	93
28...	1104	13.0	82	6.80	29.5	--	7.0	93

02430100 MACKEYS CREEK NEAR MOORES MILL, MS

DATE	TIME	STREAM-	SPE-	TRANS-			OXYGEN,
		FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		INSTAN-	DUCT-	(STAND-	ATURE	DIS-	CENT
		TANEous	(US/CM)	ARD	WATER	SOLVED	SATUR-
		(CFS)		UNITS)	(DEG C)	(MG/L)	ATION)
APR							
11...	1400	81	112	7.90	15.5	12.3	127
JUN							
27...	1500	62	121	6.00	29.0	7.1	94

SURFACE-WATER SITES--Continued

02436500 TOWN CREEK NEAR NETTLETON, MS

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	
			(STAND-ARD UNITS)	(DEG C)	(MG/L)	(PER-CENT SATUR-ATION)		
APR 12...	0830	1260	302	8.00	12.5	11.6	111	
JUN 28...	0900	14	718	9.00	24.5	9.3	113	
					SEDI-MENT, SUS-	SED. SUSP.		
					MENT, SUS-	DIS- CHARGE, SUS-	SIEVE DIAM.	
					PENDED (MG/L)	PENDED (T/DAY)	% FINER THAN .062 MM	
OCT 01...	1210	17		16	0.73	--		
NOV 18...	1100	136		77	28	--		
DEC 28...	1130	5140		490	6800	--		
JAN 28...	1425	250		44	30	--		
MAR 17...	1405	267		36	26	--		
APR 21...	1405	430		59	68	--		
JUN 08...	1100	21		23	1.3	--		
JUL 19...	1000	26		43	3.0	82		
SEP 02...	0945	9.3		54	1.4	--		
16...	1450	45		191	23	--		
			SAMPLE LOCAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	
			X-SECT.	SIEVE	SIEVE	SIEVE	SIEVE	
			LOOKING	DIAM.	DIAM.	DIAM.	DIAM.	
			UPSTRM. (% FROM R BANK)	% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	
							1.00 MM	
JUL 19...	1002	25.0		0	4	35	89	100
19...	1004	50.0		0	2	31	83	100
19...	1006	75.0		0	1	16	85	99

02437000 TOMBIGBEE RIVER NEAR AMORY, MS

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
			(STAND-ARD UNITS)	(DEG C)	(MG/L)	(PER-CENT SATUR-ATION)	
APR 12...	1200	2170	106	7.40	15.5	11.6	118
JUN 28...	1300	497	134	7.40	29.5	7.1	94

SURFACE-WATER SITES--Continued

335008088311335 TTW ABERDEEN LAKE SEDIMENTATION RANGE 1A

DATE	TIME	SAM-	SPE-	TRANS-			OXYGEN,
		PLING	CIFIC	PH	TEMPER-	PAR-	DIS-
		DEPTH	DUCT-	(STAND-	ATURE	ENCY	SOLVED
		(FEET)	(US/CM)	ARD	WATER	(SECCHI	(PER-
				UNITS)	(DEG C)	DISK)	CENT
APR							SATUR-
12...	1400	--	--	--	--	24.0	ATION)
12...	1401	1.00	115	8.20	19.0	--	10.8
12...	1402	5.00	116	8.40	18.5	--	10.3
12...	1403	10.0	115	8.40	18.0	--	9.9
12...	1404	15.0	115	8.40	18.0	--	9.7
12...	1405	20.0	115	8.30	18.0	--	9.4
12...	1406	25.0	115	8.20	18.0	--	9.3
JUN							
28...	1500	--	--	--	--	36.0	--
28...	1501	1.00	137	8.10	33.0	--	8.2
28...	1502	5.00	137	8.00	32.5	--	8.0
28...	1503	10.0	138	7.60	30.5	--	5.8
28...	1504	15.0	138	7.30	30.0	--	5.4
28...	1505	20.0	138	7.20	30.0	--	4.9
28...	1506	22.0	138	7.10	30.0	--	4.9

02437101 TOMBIGBEE RIVER BELOW ABERDEEN LOCK AND DAM, MS

DATE	TIME	SAM-	SPE-	TRANS-			OXYGEN,
		PLING	STREAM-	CON-	PH	TEMPER-	DIS-
		DEPTH	FLOW,	DUCT-	(STAND-	ATURE	SOLVED
		(FEET)	(CFS)	(US/CM)	ARD	WATER	(PER-
					UNITS)	(DEG C)	CENT
APR							SATUR-
12...	1500	--	2650	--	--	--	ATION)
12...	1501	1.00	--	119	7.90	18.0	11.5
12...	1502	5.00	--	119	7.90	18.0	11.3
12...	1503	10.0	--	118	7.90	18.0	11.2
12...	1504	12.0	--	118	7.90	18.0	11.1
JUN							
28...	1700	--	106	--	--	--	--
28...	1701	1.00	--	136	7.60	31.5	7.2
28...	1702	5.00	--	136	7.50	31.0	6.4
28...	1703	10.0	--	136	7.40	31.0	6.3
28...	1704	15.0	--	136	7.40	31.0	6.6
28...	1705	16.0	--	136	7.40	31.0	6.6

334219088281935 TTW COLUMBUS LAKE MCKINLEY CREEK BEND SR 50A

DATE	TIME	SAM-	SPE-	TRANS-			OXYGEN,
		PLING	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	DUCT-	DUCT-	(STAND-	ATURE	SOLVED
		(FEET)	(US/CM)	ANCE	ARD	WATER	(PER-
					UNITS)	(DEG C)	CENT
APR							SATUR-
13...	1530	--	--	--	--	--	ATION)
13...	1531	1.00	205	7.20	20.5	--	11.0
13...	1532	5.00	263	7.30	18.5	--	10.4
13...	1533	10.0	465	7.20	17.0	--	9.6
13...	1534	15.0	495	7.20	16.5	--	9.3
JUN							
29...	1530	--	--	--	--	50.4	--
29...	1531	1.00	705	7.40	34.0	--	7.8
29...	1532	5.00	1110	7.50	33.0	--	8.4
29...	1533	10.0	972	7.40	31.5	--	7.5
29...	1534	15.0	1330	7.10	31.0	--	5.3

SURFACE-WATER SITES--Continued

333927088304935 TTW COLUMBUS LAKE BUTTAHATCHEE RIVER BEND SR 26A

DATE	TIME	SAM-	SPE-	TRANS-			OXYGEN,
		PLING	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	(US/CM)	ANCE	ARD	ATURE	SOLVED
		(FEET)		UNITS)	(DEG C)	(SECCHI	(PER-
						DISK)	CENT
						(IN)	SATUR-
							ATION)
APR							
13...	1615	--	--	--	--	24.0	--
13...	1616	1.00	139	7.20	19.0	--	10.3
13...	1617	5.00	139	7.20	18.5	--	10.3
13...	1618	10.0	139	7.10	18.5	--	10.2
13...	1619	15.0	139	7.10	18.5	--	10.2
JUN							
29...	1700	--	--	--	--	36.0	--
29...	1701	1.00	210	7.60	33.0	--	8.1
29...	1702	5.00	209	7.60	32.5	--	8.1
29...	1703	10.0	207	7.40	31.0	--	6.6
29...	1704	15.0	212	7.20	30.5	--	5.2
29...	1705	17.0	216	6.90	30.0	--	4.4
							59

02439600 BUTTAHATCHEE RIVER NEAR KOLOLA SPRINGS, MS

DATE	TIME	STREAM-	SPE-	TRANS-			OXYGEN,
		FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		INSTAN-	DUCT-	(STAND-	ATURE	OXYGEN,	SOLVED
		TANEous	(US/CM)	ARD	WATER	(DEG C)	(PER-
		(CFS)		UNITS)	(DEG C)	(MG/L)	CENT
							SATUR-
							ATION)
APR							
13...	1030	1480		30	6.80	16.5	9.4
JUN							
29...	1000	108		39	7.00	28.0	7.0
							91

02441000 TIBBEE CREEK NEAR TIBBEE, MS

DATE	TIME	STREAM-	SPE-	TRANS-			OXYGEN,
		FLOW,	CIFIC	CON-	PH	TEMPER-	DIS-
		INSTAN-	DUCT-	(STAND-	ATURE	OXYGEN,	SOLVED
		TANEous	(US/CM)	ARD	WATER	(DEG C)	(PER-
		(CFS)		UNITS)	(DEG C)	(MG/L)	CENT
							SATUR-
							ATION)
APR							
13...	0830	1330		213	7.80	14.5	10.6
JUN							
29...	0800	140		342	7.70	28.5	6.4
							84

333119088291435 TTW COLUMBUS LAKE SEDIMENTATION RANGE 1A

DATE	TIME	SAM-	SPE-	TRANS-			OXYGEN,
		PLING	CIFIC	CON-	PH	TEMPER-	DIS-
		DEPTH	(US/CM)	DUCT-	(STAND-	ATURE	SOLVED
		(FEET)		ANCE	ARD	(DEG C)	(PER-
							CENT
							SATUR-
							ATION)
APR							
13...	1700	--	--	--	--	24.0	--
13...	1701	1.00	114	7.60	19.5	--	10.8
13...	1702	5.00	114	7.60	19.5	--	10.7
13...	1703	10.0	113	7.60	19.0	--	10.1
13...	1704	15.0	118	7.60	19.0	--	9.9
13...	1705	20.0	127	7.60	18.5	--	9.7
13...	1706	25.0	130	7.60	18.5	--	9.4
JUN							
29...	1800	--	--	--	--	31.2	--
29...	1801	1.00	212	8.20	33.5	--	8.9
29...	1802	5.00	210	8.20	33.5	--	8.8
29...	1803	10.0	213	7.80	31.5	--	7.5
29...	1804	15.0	220	7.50	30.5	--	5.1
29...	1805	20.0	210	7.20	30.0	--	4.1
29...	1806	24.0	218	7.00	29.5	--	3.1
							41

SURFACE-WATER SITES--Continued

02441391 TOMBIGBEE RIVER BELOW COLUMBUS LOCK AND DAM, MS

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L)
APR							
18...	1135	--	85	6.40	18.0	16.0	9.7 105
18...	1136	5.00	87	6.90	18.0	--	9.8 106
18...	1137	10.0	87	7.00	18.0	--	9.6 104
18...	1138	15.0	88	7.10	18.0	--	10.2 110
JUL							
11...	1200	--	50	7.30	29.0	17.5	7.7 --
11...	1201	6.50	50	7.30	28.0	--	7.6 --
11...	1202	13.0	60	7.30	28.0	--	7.5 --

02441498 TOMBIGBEE RIVER COLUMBUS BEND SR 11B AT COLUMBUS, MS

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L)
APR							
18...	1305	--	99	7.10	19.0	16.5	10.0 110
18...	1306	5.00	100	7.20	18.5	--	10.0 109
18...	1307	10.0	100	7.30	18.0	--	9.6 104
18...	1308	15.0	100	7.30	18.0	--	9.4 101
18...	1309	20.0	101	7.30	18.0	--	9.3 100
18...	1310	24.0	102	7.30	18.0	--	9.1 98
JUL							
11...	1320	--	165	7.50	28.5	20.0	6.5 --
11...	1321	6.50	170	7.40	28.5	--	6.1 --
11...	1322	10.0	170	7.30	28.5	--	5.4 --
11...	1323	13.0	160	7.30	28.0	--	5.3 --
11...	1324	16.0	160	7.30	28.0	--	5.4 --
11...	1325	20.0	160	7.30	28.0	--	5.2 --
11...	1326	23.0	165	7.30	28.0	--	5.4 --
11...	1327	26.0	160	7.20	28.0	--	5.6 --

02443500 LUXAPALLILA CREEK NEAR COLUMBUS, MS

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L)
APR						
13...	1200	788	29	8.50	16.5	10.9 112
JUN						
29...	1200	37	39	6.70	29.5	6.9 92

02443610 TOMBIGBEE RIVER PRATT CAMP SR 5HB BELOW COLUMBUS, MS

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L)
APR							
18...	1505	--	114	8.00	22.5	19.0	11.0 129
18...	1506	5.00	114	7.90	19.0	--	10.6 116
18...	1507	10.0	121	7.40	18.5	--	8.2 89
18...	1508	15.0	130	7.20	17.5	--	6.8 72
18...	1509	19.0	134	7.10	17.5	--	5.7 60
JUL							
11...	1520	--	150	8.00	30.0	31.5	8.0 107
11...	1521	6.50	150	7.40	29.0	--	6.2 81
11...	1522	10.0	150	7.30	28.5	--	4.7 61
11...	1523	13.0	160	7.00	28.0	--	0.5 6
11...	1524	15.0	160	6.90	27.0	--	0.6 8

SURFACE-WATER SITES--Continued

02444158 TOMBIGBEE RIVER ABOVE BEVILL LOCK AND DAM, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
19...	0930	--	112	7.80	19.0	23.0	7.7	84
19...	0931	5.00	113	6.80	19.0	--	8.1	88
19...	0932	10.0	113	6.90	19.0	--	8.1	88
19...	0933	15.0	113	6.90	19.0	--	8.0	87
19...	0934	20.0	113	6.90	19.0	--	7.8	85
19...	0935	25.0	113	7.00	19.0	--	7.0	76
19...	0936	30.0	113	7.00	19.0	--	7.7	84
JUL								
12...	1010	--	193	7.20	29.0	26.5	6.0	78
12...	1011	6.50	193	7.10	28.5	--	4.8	62
12...	1012	13.0	193	7.10	28.5	--	4.7	61
12...	1013	20.0	192	7.10	28.5	--	4.6	60
12...	1014	26.0	192	7.00	28.5	--	4.5	58

02444161 TOMBIGBEE RIVER BELOW BEVILL LOCK AND DAM, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
19...	1245	--	123	7.40	19.0	19.5	9.3	101
19...	1246	5.00	128	7.40	19.0	--	10.6	115
19...	1247	10.0	126	7.50	18.5	--	10.6	114
19...	1248	14.0	127	7.50	18.5	--	10.0	107
JUL								
12...	1210	--	190	7.10	29.0	18.5	6.2	81
12...	1211	6.50	190	7.10	29.0	--	6.1	79
12...	1212	13.0	190	7.10	28.5	--	5.9	77

02444210 TOMBIGBEE RIVER BIG CREEK BEND NEAR PICKENSVILLE, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
19...	1330	--	55	6.70	18.0	18.5	8.0	85
19...	1331	5.00	55	6.80	18.0	--	8.1	86
19...	1332	6.00	55	6.80	18.0	--	7.5	79
JUL								
12...	1335	--	81	7.20	29.5	12.5	6.7	88
12...	1336	3.00	81	7.10	29.5	--	6.6	87
12...	1337	5.00	81	7.10	29.5	--	6.3	83

02447010 TOMBIGBEE RIVER COOKS BEND NEAR WARSAW, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
19...	1710	--	112	7.40	19.5	14.7	9.3	102
19...	1711	5.00	112	7.50	19.5	--	9.4	103
19...	1712	10.0	112	7.60	19.5	--	9.3	102
19...	1713	15.0	112	7.60	19.5	--	9.3	102
19...	1714	20.0	112	7.60	19.5	--	9.2	101
19...	1715	25.0	112	7.60	19.5	--	9.4	103
19...	1716	29.0	113	7.50	19.5	--	9.2	100
JUL								
12...	1540	--	159	8.00	32.0	18.5	7.0	96
12...	1541	6.50	160	8.00	31.0	--	6.8	92
12...	1542	13.0	160	7.30	29.0	--	4.8	63
12...	1543	20.0	160	7.20	29.0	--	4.6	60
12...	1544	26.0	160	7.10	29.0	--	4.5	59
12...	1545	33.0	160	7.10	29.0	--	4.3	56

SURFACE-WATER SITES--Continued

02447020 TOMBIGBEE RIVER ABOVE GAINESVILLE LOCK AND DAM, AL

DATE	TIME	SPE-			TRANS-	OXYGEN,		
		SAM- PLING DEPTH (FEET)	CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	PAR- ENCY (SECCHI DISK) (IN)	DIS- SOLVED (MG/L)	DIS- SOLVED (PER- CENT SATUR- ATION)
APR								
20...	1015	--	113	6.90	19.5	24.0	8.8	96
20...	1016	5.00	112	7.40	19.5	--	8.7	95
20...	1017	10.0	112	7.40	19.5	--	8.7	95
20...	1018	15.0	113	7.50	19.5	--	8.8	96
20...	1019	20.0	112	7.50	19.5	--	8.6	94
20...	1020	25.0	112	7.50	19.5	--	8.7	95
20...	1021	30.0	113	7.50	19.5	--	8.7	95
20...	1022	35.0	112	7.50	19.5	--	8.5	93
20...	1023	37.0	111	7.50	19.5	--	8.5	93
JUL								
12...	0930	--	135	6.80	29.5	34.5	6.6	86
12...	0931	6.50	136	6.90	29.5	--	6.3	83
12...	0932	13.0	137	7.00	29.5	--	6.2	81
12...	0933	20.0	136	7.00	29.5	--	5.8	76
12...	0934	26.0	136	6.90	29.5	--	5.7	75
12...	0935	33.0	136	6.90	29.5	--	5.7	75
12...	0936	39.0	137	6.90	29.5	--	5.4	71
12...	0937	46.0	137	6.90	29.5	--	5.4	71

02448000 NOXUBEE RIVER AT MACON, MS

DATE	TIME	STREAM- FLOW, INSTAN-	SEDI- MENT, MENT, SUS-	DIS- CHARGE, SUS-	SIEVE DIAM.	SED. SUSP.		
		TANEOUS (CFS)	PENDED (MG/L)	PENDED (T/DAY)	% FINE THAN .062 MM			
OCT								
20...	1305	45	31	3.8	--			
DEC								
15...	1630	62	28	4.7	--			
JAN								
26...	1040	131	22	7.8	--			
MAR								
08...	1130	681	121	222	--			
APR								
02...	1340	2660	486	3490	96			
02...	1645	3060	435	3590	96			
02...	1800	3160	392	3340	97			
02...	2100	3250	297	2610	98			
03...	1540	3140	301	2550	97			
05...	1200	2340	152	960	--			
06...	1140	2430	141	925	--			
12...	1200	337	41	37	--			
19...	1015	604	111	181	--			
MAY								
24...	1310	159	49	21	--			
JUL								
12...	0930	186	50	25	--			
AUG								
24...	0925	67	42	7.6	--			
SEP								
06...	1015	122	35	12	100			
		SED. SUSP.	SED. SUSP.	SED. SUSP.	SED. SUSP.	SED. SUSP.		
		FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.		
		% FINE THAN .002 MM	% FINE THAN .004 MM	% FINE THAN .008 MM	% FINE THAN .016 MM	% FINE THAN .031 MM		
		SED. SUSP.	SED. SUSP.	SED. SUSP.	SED. SUSP.	SED. SUSP.		
		FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.	FALL DIAM.		
		% FINE THAN .062 MM	% FINE THAN .125 MM	% FINE THAN .250 MM	% FINE THAN .500 MM	% FINE THAN 1.00 MM		
APR								
02...	2100	61	66	72	83	94	98	100
SEP								
06...	1015	78	82	85	93	97	100	--
		SAMPLE LOCAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.	BED MAT.
		X-SECT.	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE
		LOOKING	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
		UPSTRM. (% FROM R BANK)	% FINE THAN .062 MM	% FINE THAN .125 MM	% FINE THAN .250 MM	% FINE THAN .500 MM	% FINE THAN 1.00 MM	% FINE THAN 2.00 MM
SEP								
06...	1017	25.0	5	26	46	72	85	86
06...	1019	50.0	1	4	9	24	40	55
06...	1021	75.0	0	1	5	22	40	61

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL

DATE	TIME	SAM- PLING DEPTH (FEET)	STREAM- FLOW, INSTANTANEOUS (CFS)	SPE- CIFIC DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (IN)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
OCT 14...	1020	--	245	170	7.20	20.0	--	8.9	100
NOV 18...	1000	--	910	185	7.10	15.0	--	10.3	101
DEC 16...	1100	--	300	149	6.70	12.0	--	11.7	107
JAN 12...	1115	--	3350	120	7.16	5.0	--	13.1	102
FEB 16...	1020	--	28900	118	7.84	6.0	--	13.1	105
MAR 16...	1030	--	10100	150	7.59	12.0	--	10.8	99
APR 20...	1215	--	13200	135	7.55	19.5	--	9.5	104
20...	1216	--	--	113	7.00	19.5	12.0	9.5	104
20...	1217	5.00	--	113	7.30	19.5	--	9.5	104
20...	1218	10.0	--	113	7.30	19.5	--	9.5	104
20...	1219	15.0	--	114	7.40	19.5	--	9.4	103
20...	1220	20.0	--	114	7.40	19.5	--	9.3	102
20...	1221	21.0	--	114	7.40	19.5	--	9.1	100
MAY 11...	1000	--	490	112	7.80	23.0	--	9.0	105
JUN 15...	0930	--	970	137	8.00	27.0	--	8.3	104
JUL 13...	1045	--	--	143	7.40	28.0	6.25	5.6	71
13...	1046	6.50	--	144	7.40	27.5	--	5.4	69
13...	1047	13.0	--	144	7.50	27.5	--	5.2	66
13...	1048	16.0	--	145	7.40	27.5	--	5.2	66
13...	1105	--	1060	143	8.00	28.0	--	5.6	71
AUG 10...	1000	--	550	185	7.90	30.0	--	7.7	103
SEP 13...	1000	--	1120	175	7.80	27.5	--	7.5	95

DATE	TIME	TUR- ITY (FTU)	COLI- FORM, FECAL, TUR- BID- UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. 100 ML)	HARD- NESS TOTAL (MG/L)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3)	MAGNE- SIUM, CALCIUM DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	
OCT 14...	1020	3.5	9	3	64	15	22	2.1	7.8	20	0.4
NOV 18...	1000	2.6	70	8	63	19	22	1.9	10	25	0.6
DEC 16...	1100	3.1	26	9	51	18	17	2.0	8.6	26	0.5
JAN 12...	1115	18	640	1800	44	10	15	1.7	5.5	20	0.4
FEB 16...	1020	71	1300	5900	48	14	17	1.4	3.6	13	0.2
MAR 16...	1030	2.2	110	69	55	18	19	1.8	5.2	16	0.3
APR 20...	1215	25	110	430	54	13	19	1.6	4.0	13	0.2
MAY 11...	1000	6.0	7	8	44	14	15	1.7	3.7	15	0.3
JUN 15...	0930	3.0	27	6	53	9	18	2.0	5.1	17	0.3
AUG 10...	1000	5.5	49	5	66	15	23	2.1	8.4	21	0.5
SEP 13...	1000	26	260	5300	63	14	22	1.9	8.2	21	0.5

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS FIELD MG/L AS CACO3	SULFATE TOT IT SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (TONS PER AC-FT)
OCT 14...	2.4	--	--	10	13	0.20	1.3	93	88 0.13
NOV 18...	2.6	--	--	16	20	0.10	1.4	107	100 0.15
DEC 16...	2.8	41	34	15	17	0.20	2.4	103	85 0.14
JAN 12...	2.6	42	34	13	8.2	0.20	9.9	85	79 0.12
FEB 16...	2.1	41	33	13	6.2	0.20	7.1	84	73 0.11
MAR 16...	2.1	44	36	17	7.5	0.10	6.2	97	82 0.13
APR 20...	1.6	51	42	14	6.4	0.10	5.2	90	78 0.12
MAY 11...	1.6	37	30	14	5.4	0.20	2.5	71	63 0.10
JUN 15...	1.9	53	44	11	7.3	0.20	0.57	81	72 0.11
AUG 10...	2.0	62	51	14	14	0.10	2.2	100	97 0.14
SEP 13...	2.1	61	50	14	13	0.10	2.0	96	93 0.13
DATE	SOLID(S, DIS- SOLVED (TONS PER DAY))	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA + DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L (T/DAY))	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L (T/DAY))
OCT 14...	61.5	<0.100	0.010	0.50	0.010	<0.010	<0.010	15	9.9 99
NOV 18...	263	<0.100	0.020	0.30	0.020	--	<0.010	8	20 98
DEC 16...	83.4	<0.100	0.020	0.40	0.010	<0.010	<0.010	10	8.1 93
JAN 12...	769	0.300	0.100	0.50	0.070	0.030	0.010	13	118 98
FEB 16...	6550	0.270	0.110	1.0	0.150	0.060	0.040	119	9290 96
MAR 16...	2650	0.230	0.040	0.60	0.060	0.030	0.020	30	818 99
APR 20...	3210	0.190	0.020	0.50	0.100	0.030	0.010	61	2170 95
MAY 11...	93.9	<0.100	0.030	0.40	0.020	0.010	<0.010	12	16 94
JUN 15...	212	<0.100	0.010	0.40	0.010	<0.010	0.010	19	50 95
AUG 10...	148	<0.00	<0.010	0.40	0.030	0.010	<0.010	33	49 96
SEP 13...	290	<0.100	<0.010	0.80	0.150	0.020	<0.010	62	187 95
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 14...	<10	<1	29	<0.5	<1	<1	<3	<1	5 <5
FEB 16...	140	<1	26	<0.5	4	<1	<3	6	170 <5
APR 20...	30	1	28	<0.5	<1	<1	<3	2	250 <5
AUG 10...	20	2	26	<0.5	<1	<1	<3	3	13 <5
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)
OCT 14...	<4	<1	<0.1	<10	1	<1	4.0	150	<6 16
FEB 16...	<4	51	<0.1	<10	<1	<1	<1.0	110	<6 6
APR 20...	<4	3	<0.1	<10	5	<1	<1.0	120	<6 <3
AUG 10...	5	1	<0.1	<10	2	<1	<1.0	150	<6 <3

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C., WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	176	168	171	173	170	171	184	176	177	146	130	136
2	177	165	170	175	171	173	181	176	178	138	132	134
3	175	168	170	175	173	174	197	177	181	144	135	138
4	175	169	171	176	175	175	197	176	180	161	143	146
5	176	170	173	177	175	176	180	175	176	168	148	150
6	183	170	175	179	176	179	177	173	175	149	140	146
7	186	175	180	178	176	177	173	170	172	146	134	138
8	185	174	181	178	176	177	171	163	168	194	130	159
9	186	175	180	178	176	178	168	164	167	149	129	138
10	182	173	176	182	177	180	166	160	163	128	121	124
11	179	173	175	182	178	182	164	159	161	140	117	123
12	179	171	174	182	177	181	162	160	161	130	116	125
13	175	170	172	182	178	181	161	158	159	139	127	130
14	175	166	169	182	179	181	160	155	157	127	118	122
15	173	167	168	182	177	180	156	153	154	132	111	119
16	169	167	168	182	175	180	159	154	156	143	110	120
17	170	167	167	183	176	181	184	155	161	136	111	120
18	175	166	167	185	181	184	163	155	156	119	108	112
19	168	167	167	190	185	186	160	153	156	126	109	113
20	174	167	168	186	180	185	154	151	152	148	125	140
21	168	167	167	185	180	184	152	150	151	152	141	146
22	168	167	167	186	177	184	157	149	151	145	135	138
23	169	167	167	187	178	185	172	152	154	140	134	137
24	180	167	168	187	183	185	162	148	153	138	127	134
25	170	168	168	187	182	185	156	143	147	160	122	130
26	171	169	169	188	182	186	146	135	139	131	120	126
27	172	169	169	188	181	186	140	134	137	144	119	126
28	172	170	170	186	179	184	144	140	142	135	118	123
29	172	170	170	180	175	177	151	141	145	141	116	121
30	178	171	172	192	175	177	140	134	136	129	112	117
31	180	170	171	---	---	---	138	134	135	130	108	114
MONTH	186	165	171	192	170	180	197	134	158	194	108	130
	FEBRUARY			MARCH			APRIL			MAY		
1	131	101	109	126	114	119	130	115	119	140	122	129
2	114	98	101	146	114	122	141	119	128	143	123	130
3	138	97	117	139	114	118	156	139	147	138	120	126
4	136	125	128	154	118	134	145	139	141	136	114	120
5	133	126	129	126	122	124	142	136	138	148	117	128
6	137	133	134	132	122	125	137	131	133	140	115	125
7	138	129	133	137	124	130	131	127	129	144	119	128
8	135	122	126	144	129	135	141	130	135	132	117	125
9	123	118	121	148	130	141	163	135	141	131	118	122
10	127	116	119	163	148	154	175	140	149	136	117	124
11	124	114	118	173	166	170	179	140	151	132	120	125
12	132	113	116	166	149	158	182	134	143	128	118	121
13	124	110	115	167	149	155	150	134	139	130	118	121
14	135	108	115	160	153	157	143	133	138	128	117	120
15	134	105	117	156	151	154	151	135	139	128	117	121
16	126	114	120	158	149	154	154	134	142	132	120	123
17	128	113	122	156	145	150	158	131	144	131	119	122
18	144	128	137	151	143	147	138	125	133	138	124	132
19	150	137	141	165	140	146	143	122	134	126	120	122
20	139	135	137	151	137	143	157	137	142	140	130	134
21	138	133	136	157	135	142	142	126	134	130	123	126
22	155	129	135	156	128	138	128	120	124	135	122	124
23	142	124	128	160	126	132	126	118	123	130	122	125
24	131	120	126	138	126	132	137	118	122	136	123	126
25	156	119	126	137	122	128	130	124	127	141	123	125
26	132	116	121	157	130	139	140	126	132	143	124	129
27	135	113	118	169	124	132	139	132	136	138	124	129
28	136	113	118	142	124	133	143	129	133	138	124	128
29	138	114	120	134	119	126	149	127	136	137	125	128
30	---	---	---	146	113	124	135	126	131	138	126	131
31	---	---	---	126	115	122	---	---	---	153	130	136
MONTH	156	97	124	173	113	138	182	115	135	153	114	126

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C., WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	153	133	140	174	149	162	196	178	184	201	195	198
2	146	140	144	174	159	166	198	182	189	202	190	198
3	158	134	140	201	170	189	197	178	185	198	186	194
4	148	133	139	191	158	168	207	181	194	197	190	194
5	151	135	139	192	169	183	202	183	192	198	188	194
6	153	136	143	200	177	189	203	189	195	197	185	191
7	143	136	139	177	158	167	204	189	195	198	188	193
8	148	140	144	167	159	164	201	188	194	195	185	189
9	149	132	138	180	160	171	202	188	195	190	184	186
10	142	132	136	166	157	161	198	192	195	186	181	184
11	154	138	142	171	154	159	198	192	197	190	177	184
12	154	146	150	190	165	174	199	193	196	185	176	182
13	155	142	149	184	165	173	201	194	198	184	173	181
14	147	137	141	176	172	174	200	193	197	178	175	178
15	150	140	145	173	168	170	207	194	197	177	175	176
16	144	138	141	171	168	169	203	193	198	176	174	175
17	146	142	144	170	168	169	207	195	200	180	175	178
18	146	143	144	176	169	172	202	195	198	176	169	171
19	148	137	141	177	173	175	212	196	201	180	171	176
20	150	142	146	177	174	175	216	198	205	185	169	174
21	149	141	144	180	172	176	214	196	203	182	171	175
22	155	143	150	190	173	182	210	194	200	185	171	175
23	156	139	145	200	174	185	205	193	198	177	170	174
24	159	143	148	180	173	175	217	195	203	175	168	170
25	159	149	153	181	164	173	220	197	208	170	163	166
26	159	151	154	184	175	178	212	199	206	176	163	168
27	160	151	155	179	169	173	212	198	204	173	159	164
28	160	143	149	190	175	180	213	195	204	173	159	165
29	162	149	153	185	178	182	210	195	203	165	146	157
30	164	151	157	192	174	181	206	194	200	174	153	164
31	---	---	---	192	179	185	201	192	198	---	---	---
MONTH	164	132	145	201	149	174	220	178	198	202	146	179
YEAR	220	97	155									

TEMPERATURE, WATER (DEG. C.), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	25.0	24.0	24.5	18.0	17.0	17.5	13.0	12.5	13.0	11.0	10.5	11.0
2	24.5	23.0	24.0	18.0	17.0	18.0	13.0	12.5	13.0	10.5	10.0	10.5
3	24.0	22.0	23.0	18.0	17.5	18.0	12.5	12.0	12.5	10.0	9.5	10.0
4	23.5	22.5	23.0	18.0	17.5	18.0	12.5	11.5	12.5	10.0	9.0	9.5
5	23.5	22.0	22.5	18.0	17.5	17.5	12.0	11.5	11.5	9.0	8.5	9.0
6	22.5	21.5	22.0	17.5	16.5	17.0	11.5	11.0	11.5	8.5	8.0	8.5
7	22.0	21.0	21.5	17.0	16.0	16.5	12.0	11.0	11.5	8.0	7.5	8.0
8	21.5	20.5	21.0	17.0	16.0	16.5	12.0	11.5	11.5	7.5	3.5	6.0
9	21.0	20.5	21.0	17.0	16.5	16.5	13.0	11.5	12.0	6.5	5.5	6.0
10	21.0	20.5	21.0	17.0	16.0	17.0	12.5	11.5	12.0	6.0	5.5	6.0
11	21.5	20.0	21.0	16.5	15.5	16.0	12.0	11.5	12.0	6.0	5.0	5.5
12	21.5	20.5	21.0	15.5	14.5	15.0	12.0	11.5	12.0	5.5	5.0	5.5
13	21.0	20.0	20.5	15.5	14.0	15.0	12.0	11.5	12.0	5.5	5.0	5.5
14	21.0	19.5	20.0	15.0	14.5	15.0	12.5	12.0	12.0	5.0	4.5	5.0
15	20.0	19.0	19.5	15.0	14.5	15.0	12.5	11.5	12.0	5.0	4.0	4.5
16	19.5	19.0	19.5	15.5	15.0	15.0	11.5	10.5	11.0	5.0	4.5	4.5
17	20.0	17.5	19.0	15.5	15.0	15.5	10.5	11.0	11.0	5.0	4.5	5.0
18	21.0	19.5	20.0	15.0	14.5	15.0	11.5	10.5	11.0	5.0	4.5	5.0
19	20.5	19.5	20.0	14.5	14.0	14.5	11.5	10.5	11.0	6.0	5.0	5.5
20	20.5	19.5	20.0	14.0	13.5	14.0	12.0	11.0	11.5	9.5	6.0	8.0
21	20.0	19.0	19.5	13.5	12.0	13.0	11.5	11.0	11.5	9.0	8.5	9.0
22	19.0	18.5	18.5	13.5	12.0	13.0	12.0	11.0	11.5	8.5	8.0	8.0
23	19.0	18.0	18.5	13.5	12.0	13.0	12.0	11.0	11.5	8.5	8.0	8.0
24	18.5	18.0	18.0	14.0	13.0	13.5	12.0	11.5	11.5	8.5	8.5	8.5
25	19.0	18.0	18.5	14.0	13.0	13.5	12.0	11.5	12.0	8.5	8.0	8.5
26	18.5	18.5	18.5	14.0	13.5	14.0	12.0	12.0	12.0	8.0	7.5	8.0
27	19.0	18.0	18.5	14.0	14.0	14.0	12.5	12.0	12.5	7.5	6.5	7.5
28	18.5	17.5	18.0	14.0	14.0	14.0	12.5	12.0	12.5	7.5	6.5	7.5
29	17.5	17.0	17.0	14.0	13.5	13.5	12.5	11.5	12.0	7.5	6.5	7.0
30	17.5	16.5	17.0	13.5	12.5	13.5	11.5	11.0	11.5	7.5	6.5	7.0
31	17.5	16.5	17.5	---	---	---	11.0	11.0	11.0	7.0	6.5	7.0
MONTH	25.0	16.5	20.0	18.0	12.0	15.0	13.0	10.5	12.0	11.0	3.5	7.0

SURFACE-WATER SITES--Continued

02449000 TOMBIGBEE RIVER AT GAINESVILLE, AL--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.5	7.0	7.5	10.5	10.0	10.0	18.0	17.5	17.5	21.0	17.0	20.0
2	7.5	7.0	7.5	11.0	10.0	10.5	18.5	18.0	18.0	21.0	16.0	19.5
3	9.5	7.5	8.5	11.5	10.5	11.0	19.0	18.5	19.0	21.5	15.5	20.5
4	10.0	9.5	9.5	12.5	11.5	12.0	19.5	19.0	19.0	21.5	20.0	21.0
5	10.0	9.5	9.5	12.0	12.0	12.0	20.5	19.5	20.0	22.0	20.5	21.0
6	9.5	8.5	9.0	12.5	12.0	12.0	20.5	20.5	20.5	22.0	20.5	21.0
7	8.5	7.5	8.5	12.5	12.0	12.5	20.5	20.0	20.5	22.5	18.5	21.0
8	8.0	7.5	7.5	12.5	12.5	12.5	20.5	19.5	20.0	22.0	20.0	21.0
9	7.5	7.0	7.5	13.0	12.5	12.5	20.5	19.5	20.0	23.0	18.5	21.0
10	7.5	6.5	7.0	12.5	12.0	12.5	20.5	19.5	20.0	23.5	21.0	22.0
11	7.0	6.5	7.0	12.5	12.0	12.0	20.0	19.0	19.5	23.5	18.5	22.5
12	6.5	6.0	6.5	12.5	12.5	12.5	19.5	18.5	19.5	23.5	22.5	23.0
13	6.5	5.5	6.0	13.0	12.0	12.5	19.5	19.0	19.5	24.0	22.5	23.5
14	6.5	5.5	6.0	12.5	12.0	12.5	19.5	19.0	19.5	25.0	23.0	23.5
15	6.5	6.0	6.0	12.0	11.5	12.0	20.0	19.0	19.5	25.0	23.5	24.0
16	6.0	5.5	6.0	12.0	11.0	11.5	19.5	19.0	19.5	25.5	23.5	24.5
17	6.0	5.5	5.5	12.5	11.5	12.0	20.0	19.0	19.5	25.5	24.0	25.0
18	6.0	6.0	6.0	12.0	11.5	12.0	20.0	19.5	19.5	26.5	24.5	25.0
19	6.5	6.0	6.0	12.5	11.0	11.5	19.5	19.0	19.5	26.0	24.5	25.0
20	6.5	6.5	6.5	12.5	11.5	12.0	19.5	18.0	19.0	27.0	25.0	25.5
21	7.0	6.5	7.0	13.5	11.5	12.0	19.5	18.0	19.0	25.5	25.0	25.5
22	8.0	7.0	7.5	14.0	12.0	13.0	19.5	19.0	19.5	25.0	24.5	25.0
23	8.5	7.5	8.0	14.5	12.0	13.0	19.5	19.0	19.5	25.0	24.5	25.0
24	8.5	7.5	8.0	14.5	13.5	14.0	19.5	18.5	19.0	25.0	24.5	24.5
25	8.5	7.5	8.5	14.5	13.5	14.0	20.5	19.0	20.0	25.5	24.0	24.5
26	9.0	8.0	8.5	15.5	14.5	15.0	21.0	18.0	20.5	25.0	24.0	24.5
27	9.5	8.5	9.0	16.0	15.0	15.5	21.0	18.5	20.5	25.5	24.0	24.5
28	10.0	9.0	9.5	16.5	14.0	16.0	21.5	17.0	20.0	26.0	24.0	24.5
29	10.0	9.0	10.0	16.5	15.5	16.0	21.5	18.5	20.0	26.0	24.5	25.0
30	---	---	---	17.0	16.0	16.5	20.5	17.0	19.5	26.0	24.5	25.5
31	---	---	---	17.5	17.0	17.0	---	---	---	27.0	25.0	26.0
MONTH	10.0	5.5	7.5	17.5	10.0	13.0	21.5	17.0	19.5	27.0	15.5	23.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.0	26.0	26.0	29.5	28.5	29.0	31.5	30.0	30.5	30.0	29.5	29.5
2	27.5	26.0	26.5	29.5	27.5	29.0	31.5	30.0	30.5	29.5	29.0	29.5
3	28.0	26.0	26.5	28.5	27.5	28.0	31.5	30.0	30.5	29.0	28.5	29.0
4	27.0	26.0	26.5	30.0	28.0	29.0	31.5	30.5	31.0	29.0	28.5	29.0
5	26.5	25.5	26.0	29.0	25.0	27.0	31.5	30.5	31.0	28.5	27.5	28.0
6	26.5	25.5	26.0	27.0	25.0	26.0	31.5	30.5	31.0	28.0	27.0	27.5
7	26.5	26.0	26.0	28.5	26.5	28.0	31.0	30.5	30.5	27.5	26.5	27.0
8	28.0	26.0	26.5	29.5	27.5	28.5	31.0	30.0	30.5	27.5	26.5	27.0
9	27.5	26.5	27.0	30.0	28.0	28.5	31.0	30.0	30.5	27.5	26.5	27.0
10	27.0	26.0	26.5	29.0	28.0	28.5	31.0	29.5	30.0	27.5	27.0	27.0
11	27.5	25.5	26.5	29.5	28.0	28.5	31.5	30.0	31.0	27.5	26.5	27.0
12	27.0	26.0	26.5	28.5	26.5	27.5	31.5	30.5	31.0	28.0	26.5	27.0
13	27.5	26.0	26.5	27.5	26.5	27.0	31.0	30.5	30.5	28.5	27.0	27.5
14	27.5	26.0	26.5	29.5	27.0	28.0	31.5	30.5	31.0	29.0	28.0	28.5
15	28.0	26.5	27.0	31.5	28.0	29.0	31.5	30.5	31.0	28.5	26.0	27.5
16	28.5	26.5	27.0	30.5	29.5	30.0	31.5	30.5	31.0	28.0	26.0	27.5
17	29.0	26.5	27.5	30.5	29.5	30.0	31.5	30.5	31.0	28.0	27.5	27.5
18	28.5	27.0	27.5	30.5	29.5	30.0	32.5	31.0	31.5	28.0	22.0	25.5
19	28.0	27.0	27.5	30.5	29.5	30.0	32.0	30.5	31.0	29.0	22.0	25.5
20	29.0	27.5	28.0	30.5	29.5	30.0	31.5	30.5	31.0	29.0	28.5	26.5
21	29.0	27.5	28.0	30.5	29.5	30.0	31.0	30.0	30.5	29.0	26.0	28.0
22	29.0	28.0	28.5	30.0	29.0	29.5	31.0	30.0	30.5	28.0	19.0	25.0
23	28.5	27.5	28.0	30.0	28.5	29.0	31.0	30.0	30.5	29.0	23.5	26.0
24	29.5	28.0	29.0	30.5	29.0	29.5	31.0	30.0	30.5	29.0	23.5	28.0
25	31.0	29.0	29.5	30.0	29.5	30.0	31.0	30.0	30.5	28.0	27.5	27.5
26	31.0	29.5	30.0	30.0	29.0	29.5	31.5	30.0	30.5	25.5	22.5	24.5
27	31.0	29.5	30.0	30.0	28.5	29.0	31.5	30.5	31.0	---	---	---
28	30.5	29.0	30.0	30.5	28.5	29.5	31.0	30.5	30.5	26.5	22.5	25.5
29	31.5	30.0	30.5	30.5	29.5	30.0	31.5	30.5	30.5	27.0	25.0	26.0
30	30.0	29.0	29.5	30.5	29.0	29.5	30.5	30.0	30.0	26.0	23.0	24.5
31	---	---	---	31.5	29.5	30.0	31.0	29.5	30.0	---	---	---
MONTH	31.5	25.5	27.5	31.5	25.0	29.0	32.5	29.5	30.5	30.0	19.0	27.0
YEAR	32.5	3.5	19.5									

SURFACE-WATER SITES--Continued

02466998 TOMBIGBEE RIVER ABOVE DEMOPOLIS LOCK AND DAM, AL

DATE	TIME	SPE-	CON-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-
		SAM- PLING DEPTH (FEET)					OXYGEN, DIS- SOLVED (MG/L)	SOLVED (PER- CENT SATUR- ATION)
APR								
20...	1700	--	130	7.30	19.5	21.0	9.3	102
20...	1701	5.00	130	7.50	19.5	--	9.3	102
20...	1702	10.0	131	7.50	19.5	--	9.2	101
20...	1703	15.0	131	7.60	19.5	--	9.3	102
20...	1704	20.0	131	7.60	19.5	--	9.3	102
20...	1705	25.0	131	7.60	19.5	--	9.2	101
20...	1706	30.0	131	7.50	19.5	--	9.3	102
20...	1707	35.0	131	7.60	19.5	--	9.3	102
20...	1708	40.0	132	7.60	19.5	--	9.3	102
20...	1709	45.0	132	7.60	19.5	--	9.3	102
20...	1710	50.0	132	7.60	19.5	--	9.3	102
20...	1711	55.0	132	7.60	19.5	--	9.2	101
20...	1712	58.0	132	7.60	19.5	--	9.2	101
JUL								
13...	1800	--	182	7.70	30.5	23.5	6.5	87
13...	1801	6.50	183	7.50	30.5	--	5.9	79
13...	1802	13.0	181	7.20	30.0	--	5.4	72
13...	1803	20.0	179	7.20	30.0	--	5.0	66
13...	1804	26.0	177	7.20	30.0	--	4.9	65
13...	1805	33.0	175	7.10	29.5	--	4.8	63
13...	1806	39.0	173	7.10	29.0	--	4.8	62
13...	1807	46.0	172	7.10	29.5	--	4.7	62
13...	1808	52.0	170	7.10	29.5	--	4.5	59
13...	1809	54.0	170	7.10	29.5	--	4.5	59

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC ANCE	PH (US/CM)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	DIS- SOLVED (PER- CENT SATUR- ATION)	
		DUCT- ANCE (US/CM)	(STAND- ARD UNITS)	ARD	WATER (DEG C)	(SECCHI DISK) (IN)		
OCT								
22...	1030	920	268	7.40	21.0	8.9	99	
FEB								
11...	1015	21700	157	7.47	9.0	12.4	108	
APR								
14...	1000	19300	175	7.25	19.0	9.7	104	
AUG								
18...	1040	822	282	7.60	28.0	7.2	92	
DATE	TIME	COLI- FORM, FECAL, TUR- BID- ITY (FTU)	STREP- TOCOCCI KF AGAR (COLS. 100 ML)	HARD- NESS TOTAL (MG/L)	HARD- NESS WH WAT CALCIUM DIS- SOLVED AS CACO3 CACO3	MAGNE- SIUM, DIS- SOLVED AS CACO3 CACO3	SODIUM, DIS- SOLVED AS CACO3 CACO3	SODIUM AD- SORP- TION RATIO
		100 ML)	100 ML)	NESS	NONCARB WH WAT TOT FLD AS CACO3	MG/L AS AS CA	MG/L AS AS MG	MG/L AS AS NA
OCT								
22...	1030	5.4	--	9	78	26	22	
FEB								
11...	1015	27	350	160	58	26	17	
APR								
14...	1000	--	37	36	--	0	--	
AUG								
18...	1040	8.4	25	81	82	23	26	
DATE	TIME	BICAR- POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- BONATE WATER DIS IT FIELD MG/L AS HCO3 CACO3	CHLO- WAT DIS TOT IT DIS SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS F) SIO2	SOLIDs, RESIDUE AT 180 DEG. C TUENTS, DIS- SOLVED (MG/L AS SIO2)	SOLIDs, SUM OF CONSTITUENTS, DIS- SOLVED (TONS PER AC-FT)
		MG/L AS HCO3	MG/L AS CACO3	AS SO4)	AS CL)	AS F)	MG/L AS SIO2)	MG/L AS SIO2)
OCT								
22...	2.9	--	--	41	23	0.20	3.4	
FEB								
11...	2.4	38	31	26	7.6	0.20	7.3	
APR								
14...	--	55	45	--	--	--	--	
AUG								
18...	2.5	72	59	32	22	0.10	2.5	

SURFACE-WATER SITES--Continued

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL--Continued

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO ₂ +NO ₃	NITRO- GEN,	NITRO- GEN, AM- MONIA + ORGANIC	PHOS- PHOROUS	PHOS- PHOROUS	PHOS- PHOROUS	SEDI- MENT,	SED- IMENT, DIS- CHARGE, SUS-	SED. SIEVE DIAM.
		(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	* FINER THAN .062 MM
OCT 22...	380	0.220	0.020	0.30	0.010	<0.010	<0.010	12	30	100
FEB 11...	5920	0.490	0.100	0.50	0.060	0.030	0.030	26	1520	98
APR 14...	--	0.270	0.090	0.40	0.050	0.030	0.010	30	1560	98
AUG 18...	346	0.220	0.020	0.30	0.040	0.020	<0.010	12	27	98
DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 22...	20	<1	46	<0.5	<1	2	<3	2	43	<5
FEB 11...	140	<1	30	<0.5	<1	<1	<3	2	180	<5
AUG 18...	20	1	36	<0.5	<1	<1	<3	2	37	<5
DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 22...	8	4	<0.1	<10	2	<1	<1.0	130	<6	38
FEB 11...	5	11	--	<10	<1	<1	<1.0	90	<6	8
AUG 18...	4	3	<0.1	<10	1	<1	<1.0	160	<6	8
DATE	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L CS-137)	GROSS BETA, DIS- SOLVED (PCI/L CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	RADIUM 226, URANIUM	NATURAL	
FEB 11...	<0.4	0.7	2.2	1.2	1.8	1.1	0.03	0.53		
AUG 18...	0.4	1.1	2.4	0.4	2.5	0.5	0.06	0.20		

SURFACE-WATER SITES--Continued

02469762 TOMBIGBEE RIVER BELOW COFFEEVILLE LOCK AND DAM, AL--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	245	272	177	215	175	170	168	152	170	181	170
2	221	290	272	--	210	180	170	165	140	214	205	170
3	205	284	270	186	220	170	165	169	200	240	204	179
4	--	280	270	190	180	168	147	167	201	250	125	172
5	207	275	272	184	155	172	145	178	200	251	125	169
6	209	271	278	188	158	173	155	187	200	249	--	167
7	210	273	276	190	166	188	155	177	201	220	175	160
8	222	271	274	196	167	174	160	187	200	235	175	170
9	240	270	272	210	160	167	158	188	175	220	170	171
10	235	330	270	195	158	150	141	187	160	185	172	169
11	235	340	268	195	156	148	152	187	187	180	173	170
12	229	347	270	200	174	--	154	188	186	215	180	137
13	228	344	268	200	174	164	156	188	185	170	175	112
14	225	350	270	214	176	151	170	198	182	140	175	120
15	227	360	270	216	173	150	168	200	191	185	--	132
16	232	325	272	221	165	155	170	200	190	228	173	122
17	234	320	271	220	169	158	170	197	200	235	--	--
18	238	305	272	220	163	157	156	210	195	252	--	143
19	248	260	270	210	155	175	151	210	180	255	177	131
20	261	260	270	195	148	184	158	208	176	252	175	225
21	268	330	271	171	150	188	172	200	178	339	172	224
22	271	330	274	170	148	193	174	220	179	150	170	211
23	263	325	260	169	150	181	156	230	165	149	178	225
24	271	320	261	170	157	182	160	231	186	150	176	237
25	260	310	260	168	166	185	166	135	184	152	172	237
26	265	290	266	189	240	172	170	154	182	--	173	210
27	250	290	251	213	175	157	173	157	194	--	--	270
28	243	290	250	214	162	156	174	158	205	162	--	261
29	245	288	258	210	168	160	170	158	199	165	163	270
30	247	285	205	220	--	158	175	160	198	--	172	203
31	246	--	190	225	--	140	--	170	--	172	172	--
MEAN	238	302	264	198	171	168	162	185	186	207	172	184
WTR YR 1988	MEAN	208		MAX	360		MIN	112				

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	21.0	15.0	13.0	10.5	12.0	18.0	21.5	28.0	29.0	31.5	30.0
2	27.0	21.0	16.0	--	10.0	12.0	18.0	21.5	27.0	30.5	31.0	30.0
3	25.0	21.0	16.0	12.5	11.0	13.0	18.0	21.5	27.0	30.0	31.5	30.0
4	--	20.5	16.0	12.0	11.0	13.0	18.0	21.5	27.0	30.0	31.0	30.0
5	25.0	21.0	16.0	13.0	11.0	13.0	18.0	21.5	27.0	29.0	31.0	29.0
6	25.0	20.0	15.0	13.0	10.0	14.0	20.0	22.0	26.0	29.0	--	29.0
7	25.0	21.0	15.0	13.0	10.0	14.0	20.0	22.0	27.0	29.0	31.0	29.0
8	25.0	21.0	15.0	11.5	10.0	14.0	20.0	22.0	27.0	29.0	31.0	29.0
9	24.0	20.0	15.0	10.0	10.0	14.0	20.0	23.0	27.0	29.0	30.0	29.0
10	24.0	19.0	15.0	10.0	10.0	14.0	21.0	23.0	26.0	29.0	31.0	29.0
11	28.0	19.0	15.0	10.0	10.0	14.0	21.0	23.0	27.0	29.0	31.5	29.0
12	28.0	19.0	15.0	10.0	10.0	--	20.0	23.0	27.0	30.0	30.0	28.0
13	23.0	19.0	15.0	10.0	10.0	14.0	20.0	23.0	27.0	30.0	31.0	27.5
14	23.0	18.0	15.0	9.0	10.0	14.0	20.0	24.0	27.0	30.0	--	28.0
15	23.0	18.0	14.0	9.0	10.0	14.0	20.0	24.0	28.0	30.5	30.0	29.0
16	23.0	18.0	14.0	9.0	10.0	14.0	20.0	25.0	29.0	29.5	30.0	29.0
17	23.0	18.0	14.0	9.0	10.0	14.0	20.0	24.0	27.0	30.0	--	--
18	23.0	18.0	14.0	10.0	10.0	14.0	20.0	25.0	28.0	30.5	--	--
19	23.0	18.0	14.0	10.0	9.0	14.0	20.0	25.0	28.0	30.5	32.0	28.5
20	23.0	17.0	14.0	10.0	9.0	14.0	20.0	26.0	28.5	30.5	32.0	29.0
21	23.0	16.0	14.0	10.0	9.0	14.5	20.5	26.0	29.0	30.0	32.0	29.5
22	23.0	16.0	14.0	10.0	9.0	14.5	20.5	25.0	29.0	30.0	31.0	30.0
23	23.0	16.0	15.0	10.0	10.0	15.0	20.5	25.0	29.0	30.0	30.0	29.0
24	23.0	16.0	15.0	10.0	10.0	15.0	20.5	25.0	30.0	30.0	31.0	29.0
25	23.0	16.0	15.0	10.0	10.0	15.0	21.0	25.0	30.0	30.5	30.0	30.0
26	23.0	16.5	15.0	10.0	10.0	17.0	21.0	24.0	30.0	--	31.0	30.0
27	23.0	16.0	15.0	10.0	10.0	17.0	21.5	24.0	30.0	--	--	29.0
28	20.0	16.0	15.0	10.0	11.5	17.0	21.5	24.0	30.0	30.5	--	29.0
29	20.0	16.0	15.0	10.0	11.5	16.0	22.0	24.0	31.0	30.5	31.0	29.0
30	20.0	15.0	14.0	9.0	--	16.0	22.0	24.0	30.0	--	31.0	26.0
31	20.0	--	14.0	8.5	--	16.0	--	24.0	--	31.0	30.5	--
MEAN	23.5	18.0	15.0	10.5	10.0	14.5	20.0	23.5	28.0	30.0	31.0	29.0
WTR YR 1988	MEAN	21.0		MAX	32.0		MIN	8.5				

APPENDIX C

DISPOSAL AREA DATA

APPENDIX C

DISPOSAL AREA DATA

DESCRIPTIONS OF WELLS

DESCRIPTIONS OF DISPOSAL AREA WELLS

LOCAL NUMBER	OWNER	LAND NET LOCATION	DATE COMPLETED	ALTITUDE OF LAND SURFACE (FEET)	DEPTH OF WELL (FEET)	CASING DIAM- ETER (INCHES)
TISHOMINGO COUNTY						
J071	USCE 1704-A	SENES17T05SR10E	02/13/1980	440.00	32.0	4.00
J072	USCE 1704-B	SENES17T05SR10E	02/14/1980	440.00	21.0	4.00

APPENDIX C

DISPOSAL AREA DATA

WATER-QUALITY FIELD DETERMINATIONS

DISPOSAL AREA WELLS

LOCAL IDENT- I- FIER	STATION	NUMBER	DATE	TIME	DEPTH	SPE-	PH	TEMPER-
					BELOW LAND	SURFACE (WATER LEVEL)		
TISHOMINGO COUNTY								
J071 USCE 1704-A		343855088155380	03-04-88 08-09-88	0839 0830	21.46 21.29	900 320	4.60 5.10	16.5 17.0
J072 USCE 1704-B		343855088155381	03-04-88 08-09-88	0916 0900	8.67 13.18	1500 600	5.70 5.76	13.0 18.0

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

SURFACE-WATER CHEMISTRY

03592824 TENN-TOM WATERWAY AT CROSS ROADS, MS

SURFACE WATER	ALKALINITY, NITRO-CARBON-ATE NO ₂ +NO ₃	NITROGEN, AMMONIA KJELDAHL, PHORUS, TOTAL (MG/L AS N)	NITROGEN, GEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL SOLVED (MG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	CALCIUM, TOTAL SOLVED (MG/L AS Ca)	COPPER, TOTAL SOLVED (UG/L AS Cu)	ZINC, TOTAL SOLVED (UG/L AS Zn)	SODIUM, TOTAL SOLVED (MG/L AS Na)	POTASSIUM SULFATE, DIS-CALCATED (MG/L AS K)	DIS-CALCATED (MG/L AS K)	CA AND Mg HARDNESS (MG/L AS K)	
TURBID-ITY (NTU) - CAC03	6.9	48	0.17	0.1	0.2	0.03	< .01	< .01	< .01	430	< 10	97	42	8.9	16	< 10	240
DATE	04/11/88	10	60	0.01	0.03	0.34	< .01	< .01	< .01	350	< 10	8	4.9	3.2	22	< 10	200
DATE	07/06/88																75
TRUE COLOR																	

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343140088192235 TENN-TOM WATERWAY BAY SPRINGS LAKE NAVIGATION MILE 412.3

SURFACE WATER	ALKALINITY, NITRO-CARBON-ATE NO ₂ +NO ₃	NITROGEN, AMMONIA KJELDAHL, PHORUS, TOTAL (MG/L AS N)	NITROGEN, GEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL SOLVED (MG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	CALCIUM, TOTAL SOLVED (MG/L AS Ca)	COPPER, TOTAL SOLVED (UG/L AS Cu)	ZINC, TOTAL SOLVED (UG/L AS Zn)	SODIUM, TOTAL SOLVED (MG/L AS Na)	POTASSIUM SULFATE, DIS-CALCATED (MG/L AS K)	DIS-CALCATED (MG/L AS K)	CA AND Mg HARDNESS (MG/L AS K)	
TURBID-ITY (NTU) - CAC03	3.2	34	0.13	0.03	0.06	< 0.01	< 0.01	< 0.01	< 0.01	190	< 10	7	16	2.8	2.6	15	16
DATE	04/11/88	4.1	40	0.03	0.03	0.16	< 0.01	< 0.01	< 0.01	70	< 10	87	< 5	3.6	16	< 10	90
DATE	06/27/88																55
TRUE COLOR																	

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02430005 TENN-TOM WATERWAY BL BAY SPRINGS LOCK & DAM, MS

SURFACE WATER	ALKALINITY, NITRO-CARBON-ATE NO ₂ +NO ₃	NITROGEN, AMMONIA KJELDAHL, PHORUS, TOTAL (MG/L AS N)	NITROGEN, GEN, TOTAL (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, TOTAL SOLVED (MG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	MANGANESE, DIS-SOLVED (UG/L AS Mn)	CALCIUM, TOTAL SOLVED (MG/L AS Ca)	COPPER, TOTAL SOLVED (UG/L AS Cu)	ZINC, TOTAL SOLVED (UG/L AS Zn)	SODIUM, TOTAL SOLVED (MG/L AS Na)	POTASSIUM SULFATE, DIS-CALCATED (MG/L AS K)	DIS-CALCATED (MG/L AS K)	CA AND Mg HARDNESS (MG/L AS K)	
TURBID-ITY (NTU) - CAC03	6.4	32	0.14	0.06	0.16	< 0.01	< 0.01	< 0.01	< 0.01	290	< 10	29	2.8	2.6	15	< 10	150
DATE	04/11/88	3.9	40	0.04	0.04	0.18	< 0.01	< 0.01	< 0.01	90	< 10	77	< 5	3.4	16	< 10	60
DATE	07/06/88																54
TRUE COLOR																	

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02430100 MACKEYS CREEK NR MADDRES MILL, MS

SURFACE WATER	ALKALINITY, CARBON- ATE NOT + ND3	NITRO- GEN, AMMONIA KJEDHAL, TOTAL (H-N)	NITRO- GEN, GEN, AMMONIA KJEDHAL, TOTAL (H-N)	PHOS- PHORUS, ORTHO, DIS- TOTAL (M6/L) AS N)	PHOS- PHORUS, ORTHO, DIS- TOTAL (M6/L) AS N)	IRON, TOTAL (M6/L) AS N)	IRON, TOTAL (M6/L) AS N)	MANGA- NESE, DIS- TOTAL (M6/L) AS N)	MANGA- NESE, DIS- TOTAL (M6/L) AS N)	CALCIUM SULFATE, DIS- TOTAL (M6/L) AS K)	SODIUM POTASSIUM SULFATE, DIS- TOTAL (M6/L) AS K)
DATE (NU)	TURBID- ITY (M6/L)	PHOS- PHORUS, ORTHO, DIS- TOTAL (M6/L) AS N)	PHOS- PHORUS, ORTHO, DIS- TOTAL (M6/L) AS N)	IRON, TOTAL (M6/L) AS N)	IRON, TOTAL (M6/L) AS N)	ZINC SOLVED TOTAL (M6/L) AS ZN)	COPPER SOLVED TOTAL (M6/L) AS CU)	ALUMINUM SOLVED TOTAL (M6/L) AS AL)	ALUMINUM SOLVED TOTAL (M6/L) AS AL)	CA AND MG SOLVED TOTAL (M6/L) AS MA)	CA AND MG SOLVED TOTAL (M6/L) AS K)

NON-SUPERVISORY

3142301088242935 TENN-TOM WATERWAY 100' "00' 8000' SEDIMENTATION RANGE 1AD

TV A-6

12 3

TOWN CREEK NR NETTLETON, MS

TRUE
COLOR

340105088205435 TENN-TOM WATERWAY LOCK "A" POOL SEDIMENTATION RANGE 1A

SURFACE WATER	ALKALINITY, CARBON-ATE	NITRO-GEN, NO2+NO3	NITRO-GEN, TOTAL	NITRO-GEN, TOTAL	PHOS-PHORUS, TOTAL	PHOS-PHORUS, DIS-SOLVED	PHOS-PHORUS, TOTAL	IRON, DIS-SOLVED	IRON, TOTAL	MANGANESE, DIS-SOLVED	MANGANESE, TOTAL	CALCIUM, DIS-SOLVED	CALCIUM, TOTAL	COPPER, ALUMINUM	ZINC, TOTAL	SODIUM, POTASSIUM SULFATE	DIS-CALC.	DIS-CALC.	CA AND Mg HARDNESS	
DATE	04/12/88 07/06/88	16 15.7	10 30	0.12 0.03	0.07 0.04	0.22 0.27	0.03 < 0.01	< 0.01	2200 720	260 < 10	270 180	1.3 < 5	1.1 2.8	4.2 8.8	4.3 < 10	< 10 < 10	1200 470	1.7 1.1	1.1 < 10	16 33
TRUE COLOR																				

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37

02437000 TOMBIGBEE RIVER NR AMORY, MS

SURFACE WATER	ALKALINITY, CARBON-ATE	NITRO-GEN, NO2+NO3	NITRO-GEN, TOTAL	NITRO-GEN, TOTAL	PHOS-PHORUS, TOTAL	PHOS-PHORUS, DIS-SOLVED	PHOS-PHORUS, TOTAL	IRON, DIS-SOLVED	IRON, TOTAL	MANGANESE, DIS-SOLVED	MANGANESE, TOTAL	CALCIUM, DIS-SOLVED	CALCIUM, TOTAL	COPPER, ALUMINUM	ZINC, TOTAL	SODIUM, POTASSIUM SULFATE	DIS-CALC.	DIS-CALC.	CA AND Mg HARDNESS
DATE	NOT SAMPLED																		
TRUE COLOR																			

TVA-7

335008088311355 TENN-TOM WATERWAY ABERDEEN LAKE SEDIMENTATION RANGE 1A

SURFACE WATER	ALKALINITY, CARBON-ATE	NITRO-GEN, NO2+NO3	NITRO-GEN, TOTAL	NITRO-GEN, TOTAL	PHOS-PHORUS, TOTAL	PHOS-PHORUS, DIS-SOLVED	PHOS-PHORUS, TOTAL	IRON, DIS-SOLVED	IRON, TOTAL	MANGANESE, DIS-SOLVED	MANGANESE, TOTAL	CALCIUM, DIS-SOLVED	CALCIUM, TOTAL	COPPER, ALUMINUM	ZINC, TOTAL	SODIUM, POTASSIUM SULFATE	DIS-CALC.	DIS-CALC.	CA AND Mg HARDNESS	
DATE	04/12/88 07/06/88	10 14.4	40 45	0.3 0.01	0.16 0.07	0.46 0.31	0.04 0.06	< 0.01	1700 840	250 < 10	160 230	32 9	1.9 2.7	1.6 20	20 17	< 10 < 10	320 510	3.1 1.1	1.6 < 10	13 54
TRUE COLOR																				

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23

02437101 TENN-10M WATERWAY BI ABERDEEN ROCK & DAM

TENN-10H WATERWAY BI ABERDEEN LOCK & DAM

DATE	SURFACE WATER			PHOSPHORUS,			IRON,			MANGANESE,			CALCIUM			MAGNESIUM			SODIUM POTASSIUM SULFATE	
	TURBID- ITY (NTU)	NITRO- GEN, ATR NO ₂ +NO ₃	NITRO- GEN, AMMONIA N	KJELDAHL TOTAL	PHOS- PHORUS, TOTAL	PHOS- PHORUS, DIS- SOVED	IRON, TOTAL	IRON, DIS- SOVED	IRON, TOTAL	MANGANESE, TOTAL	MANGANESE, DIS- SOVED	ZINC	COPPER	ALUMINUM	ZINC	COPPER	ALUMINUM	SODIUM	POTASSIUM	SULFATE
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(AS X)	(AS X)
04/12/98	8	42	0.14	0.09	0.37	0.06	< 0.01	< 0.01	1600	150	47	1.8	1.5	19	19	< 10	830	3	1.5	12
06/28/98	20	45	10	0.1	0.91	0.07	< 0.01	< 0.01	1200	< 10	300	< 5	2.8	17	< 10	< 10	770	54	54	

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3342190088281935 11W COLUMBIA LAKE MCKINLEY CREEK REND SO 50A

TVA-8

CIVIL AIRLINE DATA NOT INCLUDED

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BULLAWATCHE RIVER NR KOKOON SPRINGS. NS

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3335927008304925 TENN-10M WATERWAY COLUMBUS LAKE BUTTAHATCHEE R BENDWAY 26A

ALKALI-SURFACE WATER

SURFACE WATER		ALTA-LINITY, CARBON-ATE TOTAL-FLD	NITRO-GEN, AMMONIA-NH3 TOTAL	NITRO-GEN, AMMONIA-NH3 TOTAL	PHOS-PHORUS, TOTAL	PHOS-PHORUS, TOTAL	IRON, TOTAL	MANGANESE, TOTAL	MANGANESE, TOTAL	MAGNE-SIUM, TOTAL	CALCIUM, TOTAL	COPPER, TOTAL	SODIUM, TOTAL	POTASSIUM, TOTAL	DIS-SOLVED AS MG/L	DIS-SOLVED AS ZN)	CA AND MAGNESIUM, CALC.
DATE	DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	HARDNESS AS K (HS/L)
04/12/88	04/12/88	12	44	0.15	0.1	0.56	0.06	< 0.01	1700	110	140	< 5	1.8	1.5	21	19	10 < 10
05/29/88	05/29/88	17.8	70	0.79	0.07	0.53	0.05	< 0.01	850	10	280	22	2.8	2.6	26	16 < 10	570

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02411000 THREE CENTS NO THREE M

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RUE

SURFACE WATER

SURFACE WATER	DATE	ALKALINITY			NITRO-GEN, NO ₂ +NO ₃			AMMONIA NITROGEN, NH ₃ N			PHOSPHORUS, P			IRON, OXIDE, FeO			IRON, DISOLVED, Fe			MANGANESE, MnO ₄ ⁻			CALCIUM, CaCO ₃			SODIUM, Na ⁺			POTASSIUM SULFATE, K ₂ SO ₄			DIS-SOLVED, mg/L			CA AND Mg, mg/L		
		TURBIDITY (NTU)	IT-FD	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL				
04/12/88	10	38	0.2	0.07	0.53	0.06	< 0.01	1600	150	110	1.5	20	30	< 10	870	3.8	1.6	13	57	10	26	20	2.5	1.7	5	1.5	2.5	10	10	10	10	10	10				
06/29/88	13.3	45	0.01	0.02	0.44	0.06	< 0.01	530	< 10	230	< 5	26	30	< 10	280	3.8	1.6	13	57	13.3	26	20	2.5	1.7	5	1.5	2.5	10	10	10	10	10	10				

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02441391 TOMBIGEE RIVER BL COLUMBUS LOCK & DAM, MS

SURFACE WATER	ALKALINITY	NITRO-CARBONATE	NITRO-GEN, NO ₂ +NO ₃	NITRO-GEN, AMMONIA KJELDAHL	PHOSPHORUS, ORTHO, DIS-SOLVED	IRON, TOTAL SOLVED	MANGANESE, TOTAL SOLVED	MAGNESIUM, TOTAL SOLVED	POTASSIUM SULFATE, CA AND MG
DATE	TURBID-ITY (NTU)	TURBID-ITY (NG/L)	TOTAL (AS N)	TOTAL (AS N)	(Mg/L) (AS P)	(μg/L) (AS FE)	(μg/L) (AS Mn)	(Mg/L) (AS Al)	(Mg/L) (AS K)
04/20/88	5	30	0.11	0.02	0.46	0.06	< 0.01	1400	< 10
07/25/88	6	55	0.03	0.08	0.32	0.01	< 0.01	450	< 10
								130	< 5
								24	14
								2.1	1.3
								7.2	1.4
								< 10	< 10
								350	450
								< 10	3.2
								350	1.4
								12	12
								25	25

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02441498 TOMBIGEE RIVER COLUMBUS BEND SR 118 AT COLUMBUS, MS

SURFACE WATER	ALKALINITY	NITRO-CARBONATE	NITRO-GEN, NO ₂ +NO ₃	NITRO-GEN, AMMONIA KJELDAHL	PHOSPHORUS, ORTHO, DIS-SOLVED	IRON, TOTAL SOLVED	MANGANESE, TOTAL SOLVED	MAGNESIUM, TOTAL SOLVED	POTASSIUM SULFATE, CA AND MG
DATE	TURBID-ITY (NTU)	TURBID-ITY (NG/L)	TOTAL (AS N)	TOTAL (AS N)	(Mg/L) (AS P)	(μg/L) (AS FE)	(μg/L) (AS Mn)	(Mg/L) (AS Al)	(Mg/L) (AS K)
04/20/88	10	34	0.14	0.03	0.44	0.05	< 0.01	1300	< 10
07/25/88	4.6	45	1.3	0.03	0.4	0.02	< 0.01	260	< 10
								130	< 5
								2.3	1.7
								25	1.5
								210	1.6
								< 10	3.6
								210	1.5
								12	12
								28	28

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TVA-10

SURFACE WATER	ALKALINITY	NITRO-CARBONATE	NITRO-GEN, NO ₂ +NO ₃	NITRO-GEN, AMMONIA KJELDAHL	PHOSPHORUS, ORTHO, DIS-SOLVED	IRON, TOTAL SOLVED	MANGANESE, TOTAL SOLVED	MAGNESIUM, TOTAL SOLVED	POTASSIUM SULFATE, CA AND MG
DATE	TURBID-ITY (NTU)	TURBID-ITY (NG/L)	TOTAL (AS N)	TOTAL (AS N)	(Mg/L) (AS P)	(μg/L) (AS FE)	(μg/L) (AS Mn)	(Mg/L) (AS Al)	(Mg/L) (AS K)
04/20/88	10	34	0.14	0.03	0.44	0.05	< 0.01	1300	< 10
07/25/88	4.6	45	1.3	0.03	0.4	0.02	< 0.01	260	< 10
								130	< 5
								2.3	1.7
								25	1.5
								210	1.6
								< 10	3.6
								210	1.5
								12	12
								28	28

LUXAPALLILA CREEK NR COLUMBUS, MS

SURFACE WATER	ALKALINITY	NITRO-CARBONATE	NITRO-GEN, NO ₂ +NO ₃	NITRO-GEN, AMMONIA KJELDAHL	PHOSPHORUS, ORTHO, DIS-SOLVED	IRON, TOTAL SOLVED	MANGANESE, TOTAL SOLVED	MAGNESIUM, TOTAL SOLVED	POTASSIUM SULFATE, CA AND MG
DATE	TURBID-ITY (NTU)	TURBID-ITY (NG/L)	TOTAL (AS N)	TOTAL (AS N)	(Mg/L) (AS P)	(μg/L) (AS FE)	(μg/L) (AS Mn)	(Mg/L) (AS Al)	(Mg/L) (AS K)
04/20/88	10	34	0.14	0.03	0.44	0.05	< 0.01	1300	< 10
07/25/88	4.6	45	1.3	0.03	0.4	0.02	< 0.01	260	< 10
								130	< 5
								2.3	1.7
								25	1.5
								210	1.6
								< 10	3.6
								210	1.5
								12	12
								28	28

NOT SAMPLED

TRUE COLOR

TOMBIGBEE RIVER AT PRATT CAMP SR 5HB BL. COLUMBUS, MS

TOMBIGBEE RIVER AT PRATT CAMP SR 5HB BL COLUMBUS, MS

DATE	TURBID-ITY (NTU)	ALKALINITY, NITRO-CARBON-ATE NO ₂ +NO ₃	NITRO-GEN, AMMONIA KJELDAHL	NITRO-GEN, TOTAL	PHOS-PHORUS, ORTHO, TOTAL	PHOS-PHORUS, DIS-SOLVED (Mg/L)	IRON, TOTAL	IRON, DIS-SOLVED (Mg/L)	MANGANESE, TOTAL	MANGANESE, DIS-SOLVED (Mg/L)	CALCIUM, TOTAL	CALCIUM, DIS-SOLVED (Mg/L)	COPPER, TOTAL	COPPER, DIS-SOLVED (Mg/L)	ZINC, TOTAL	ZINC, DIS-SOLVED (Mg/L)	SODIUM, TOTAL	SODIUM, DIS-SOLVED (Mg/L)	POTASSIUM, TOTAL	POTASSIUM, DIS-SOLVED (Mg/L)	CA AND MG HARDNESS, CALC.	HARDNESS, (Mg/L)
9/1/20/88	9	44	0.05	0.03	0.48	0.05	< 0.01	970	< 10	130	< 5	1.9	1.4	11	19	< 10	190	4.1	1.8	14	35	
13/7/23/88	13	45	0.01	0.02	0.12	< 0.01	< 0.01	580	< 10	140	67	2	23	< 10	< 10	360	1.0	1.0	1.0	1.0	66	

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TOMBIGEE RIVER AT ALICEVILLE LOCK & DAM, AL

TOMBIGEE RIVER AND ALICEVILLE LOCK & DAM, AL

DATE	TURBID-ITY (NTU)	ALKALINITY CARBON-ATE NO2+NO3	NITRO-GEN, AMMONIA XECDL	NITRO-GEN, TOTAL	PHOS-PHORUS, TOTAL	PHOS-PHORUS, DISSOLVED	IRON, TOTAL	MAGNE-NESI, TOTAL	MAGNE-NESI, DISSOLVED	ZINC, TOTAL	COPPER, TOTAL	ALUMINUM, TOTAL	SODIUM, TOTAL	POTASSIUM, TOTAL	SULFATE, DISSOLVED	CA AND MG, SOLVED	HARDNESS, CALC.
4/20/88	8	38	0.09	0.03	0.46	0.05	< 0.01	1400	80	130	< 5	1.8	8.6	16	< 10	460	13
7/25/88	5.3	50	0.01	0.04	0.48	0.03	< 0.01	480	< 10	160	< 5	2	23	< 10	< 10	340	29

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CONDICIONES GENERALES DE VENTA Y USO 11

LANDSCAPE DESIGN IN AN INSTITUTE LOOKING FORWARD

DATE	TURBID- ITY (NTU)	CATION (Mg/L)	ALKALI- NITY, CARBON- ATE (Mg/L)	NITRO- GEN, AMMONIA (mg/L)	NITRO- GEN, TOTAL (mg/L)	PHOS- PHORUS, TOTAL (mg/L)	PHOS- PHORUS, ORTHO, TOTAL (mg/L)	IRON, TOTAL (mg/L)	IRON, DIS- SOLVED (mg/L)	CALCIUM, TOTAL (mg/L)	CALCIUM, DIS- SOLVED (mg/L)	ZINC, TOTAL (mg/L)	ZINC, AS ZN (mg/L)	SODIUM, TOTAL (mg/L)	SODIUM, AS K (mg/L)	POTASSIUM, TOTAL (mg/L)	POTASSIUM, AS K (mg/L)	SULFATE, TOTAL (mg/L)	SULFATE, AS SO4 (mg/L)	DIS- SOLVED (mg/L)	DIS- SOLVED (mg/L)	HARDNESS CALC. (mg/L)	HARDNESS AS K (mg/L)
1/29/88	7	38	0.07	0.03	0.44	0.06	< 0.01	1300	90	150	< 5	1.8	9.1	17	< 10	< 10	310	< 10	3.9	1.8	13	30	
2/25/88	3.4	50	0.01	0.07	0.43	0.04	< 0.01	1250	< 10	190	< 5	2.1	23	< 10	< 10	270	< 10	2.1	0.7	13	66		

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02446210 TOMBIGEE RIVER BIG CREEK BEND NR PICKENSVILLE, AL

SURFACE WATER	ALKALINITY, NITROGEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)			
TURBIDITY (NTU) (NTU) (CAC03)	11.7	40	< 0.01	0.05	0.3	0.06	< 0.01	1900	< 10	240	1.8	1.4	2.2	4.4	< 10	210	2.1	1.2	9	13	30	< 10	630	2.1	1.2	31	29	
DATE	04/20/88	13.7	< 0.01	0.06	0.82	0.1	0.01	1700	90	390	< 5	2	8.3	< 10	< 10	< 10	210	2.1	1.2	9	13	30	< 10	630	2.1	1.2	31	29
TRUE COLOR																												

38
7

02446500 SIPSEY RIVER NR ELRUD, AL

SURFACE WATER	ALKALINITY, NITROGEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)			
TURBIDITY (NTU) (NTU) (CAC03)	11	40	0.08	0.02	0.48	0.08	< 0.01	1500	140	170	16	2	1.6	9.2	< 10	10	210	3.3	1.6	12	31	< 10	230	3.3	1.6	31	29	
DATE	04/20/88	4.4	50	0.01	0.08	0.5	0.02	< 0.01	320	< 10	110	< 5	2.3	1.6	21	< 10	< 10	210	3.3	1.6	12	31	< 10	230	3.3	1.6	31	29
NOT SAMPLED																												
TRUE COLOR																												

TVA-12

02447010 TOMBIGEE RIVER AT COOKS BEND/NW MANSAN, AL

SURFACE WATER	ALKALINITY, NITROGEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	NITROGEN, GEN, AMMONIA KJELDAHL, PHOBUS, TOTAL (MG/L - AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	IRON, DIS-SOLVED (MG/L - AS P)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)	ZINC (UG/L AS ZN)	COPPER ALUMINUM (UG/L AS CU)	SODIUM (MG/L AS NA)	POTASSIUM SULFATE (MG/L AS K)	DIS-CALCIUM (MG/L AS MN)	MAGNESIUM (MG/L AS NE)			
TURBIDITY (NTU) (NTU) (CAC03)	11	40	0.08	0.02	0.48	0.08	< 0.01	1500	140	170	16	2	1.6	9.2	< 10	10	210	3.3	1.6	12	31	< 10	230	3.3	1.6	31	29	
DATE	04/20/88	4.4	50	0.01	0.08	0.5	0.02	< 0.01	320	< 10	110	< 5	2.3	1.6	21	< 10	< 10	210	3.3	1.6	12	31	< 10	230	3.3	1.6	31	29
TRUE COLOR																												

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02447020

TOMBIGEE RIVER AB GAINESVILLE LOCK & DAM, AL

SURFACE WATER	ALKALINITY	NITROGEN, GEN,	NITROGEN, GEN,	NITROGEN, GEN,	PHOSPHORUS, ORTHO,	IRON, DIS-SOLVED	MANGANESE, DIS-SOLVED	MANGANESE, DIS-SOLVED	CALCIUM, DIS-SOLVED	COPPER, TOTAL	ZINC, TOTAL	SODIUM, TOTAL	POTASSIUM, TOTAL	SODIUM, DIS-SOLVED	POTASSIUM, DIS-SOLVED	CA AND Mg HARDNESS	
DATE	TURBOID-IT-FLD ITY (NTU)	NO2+NO3 (MG/L)	AMMONIA KJEDHAL (MG/L)	TOTAL (MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	AS Ca, AS Mn, AS K)	
04/20/88	11	42	0.21	0.02	0.48	0.08	< 0.01	2100	10	150	< 5	2	1.5	9.8	18	< 10	33
07/23/88	5.6	55	0.02	0.06	0.41	0.03	< 0.01	380	< 10	120	< 5	2.1	21	< 10	300	< 10	61
			TRUE COLOR														

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TVA-13

02446500

MOXUBEY RIVER NR GEIGER, AL

SURFACE WATER	ALKALINITY	NITROGEN, GEN,	NITROGEN, GEN,	NITROGEN, GEN,	PHOSPHORUS, ORTHO,	IRON, DIS-SOLVED	MANGANESE, DIS-SOLVED	MANGANESE, DIS-SOLVED	CALCIUM, DIS-SOLVED	COPPER, TOTAL	ZINC, TOTAL	SODIUM, TOTAL	POTASSIUM, TOTAL	SODIUM, DIS-SOLVED	POTASSIUM, DIS-SOLVED	CA AND Mg HARDNESS
DATE	TURBOID-IT-FLD ITY (NTU)	NO2+NO3 (MG/L)	AMMONIA KJEDHAL (MG/L)	TOTAL (MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	AS Ca, AS Mn, AS K)
NOT SAMPLED			TRUE COLOR													

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TOMBIGEE RIVER AT GAINESVILLE, AL

SURFACE WATER	ALKALINITY	NITROGEN, GEN,	NITROGEN, GEN,	NITROGEN, GEN,	PHOSPHORUS, ORTHO,	IRON, DIS-SOLVED	MANGANESE, DIS-SOLVED	MANGANESE, DIS-SOLVED	CALCIUM, DIS-SOLVED	COPPER, TOTAL	ZINC, TOTAL	SODIUM, TOTAL	POTASSIUM, TOTAL	SODIUM, DIS-SOLVED	POTASSIUM, DIS-SOLVED	CA AND Mg HARDNESS	
DATE	TURBOID-IT-FLD ITY (NTU)	NO2+NO3 (MG/L)	AMMONIA KJEDHAL (MG/L)	TOTAL (MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	AS Ca, AS Mn, AS K)	
04/20/88	24	44	0.19	0.03	0.58	13	< 0.01	3200	10	190	< 5	2.3	1.5	10	18	< 10	34
07/25/88	32	75	0.3	0.12	0.72	0.15	0.03	3200	< 10	63	< 5	1.9	32	< 10	3500	< 10	88
			TRUE COLOR														

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02466998 TOMBIGEE RIVER AB DEMOPOLIS LOCK & DAM, AL

SURFACE WATER DATE	ALKALINITY	NITROGEN	NITROGEN	PHOSPHORUS	IRON, DIS-	MANGANESE	MAGNESIUM	CALCIUM	ZINC	COPPER	ALUMINUM	SODIUM	POTASSIUM	SULFATE	DIS-	DIS-	CA AND MG				
	CARBONATE ATE (MG/L)	GEN, NH ₃ +NO ₂ +NO ₃	GEN, AMMONIA KJELDAHL, TOTAL (MG/L)	PHOSPHORUS, TOTAL (MG/L)	PHOSPHORUS, SOLVED (MG/L)	IRON, TOTAL (MG/L)	NESE, TOTAL (UG/L)	NESE, SOLVED (UG/L)	CALCIUM TOTAL (MG/L)	ZINC TOTAL (UG/L)	COPPER TOTAL (UG/L)	ALUMINUM TOTAL (UG/L)	SODIUM SOLVED (MG/L)	POTASSIUM SOLVED (MG/L)	SULFATE SOLVED (MG/L)	DIS-	SOLVED (MG/L)	HARDNESS CALC. (MG/L)			
04/20/88	11	36	0.3	0.34	0.09	< 0.01	1300	< 10	140	< 5	4.6	3.8	8.5	15	< 10	30	620	6	1.8	32	40
04/25/88	10.2	50	0.13	0.05	0.37	< 0.01	610	< 10	65	< 5	5.4	22	< 10	610	< 10	77					

TRUE
COLOR

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

GROUND-WATER CHEMISTRY

DISPOSAL AREA WELL USCE 1704-A							
GROUND WATER	DEPTH	TRUE COLOR	TOTAL ALKA LINITY (MG/L)	DIS- SOLVED NO3 + NO2 (MG/L)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAGNE- SIUM (MG/L)	DIS- SOLVED POTAS- SIUM (MG/L)
DATE							
03/07/88	0	90	29	0.01	21.4	10	10
						2.2	110
							18000
							2000

DISPOSAL AREA WELL USCE 1704-B							
GROUND WATER	DEPTH	TRUE COLOR	TOTAL ALKA LINITY (MG/L)	DIS- SOLVED NO3 + NO2 (MG/L)	DIS- SOLVED CAL- CIUM (MG/L)	DIS- SOLVED MAGNE- SIUM (MG/L)	DIS- SOLVED POTAS- SIUM (MG/L)
DATE							
03/07/88	0	14	58	0.01	32	20.3	9
						7.4	270
							30000
							3500

TVA-17

(TVA-19 follows)

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

SEDIMENT CHEMISTRY

TEEN-TOM WATERWAY AT CROSS ROADS, MS										HEPTA-CHLOR-EPOXIDE											
SEDIMENT DATE		ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COPPER (MG/KG)	COBALT (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'-DDT (UG/KG)	P,P'-DDO (UG/KG)	P,P'-DDDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	ENDRIN (UG/KG)	TOKA-PHENYL (UG/KG)	HEPTA-CHLOR (UG/KG)	
06/27/88	2.5	< 0.1	20	5	2	12	56	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 500	< 10	< 10	
HEPTA-CHLOR (UG/KG)	2,4-d	PCB-1254	PCB-1260	PCB-1272	PCB-1273	PCB-1242	PCB-1248	PCB-1016	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFAN (UG/KG)	SULFATE (UG/KG)	MERCURY (UG/KG)	ENDRIN (UG/KG)	ENDRIN (UG/KG)	ENDRIN (UG/KG)	
< 10	< 1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 10	< 10	93.6	98.3	70.7	55.5

TVA-21

34220 108B242935 TENN-TOM WATERWAY LOCK "D" POOL SEDIMENTATION RANGE IAD

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	DIELDRIN (UG/KG)	ENDRIN (UG/KG)	TOTAL PHEENE (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/KG)
06/27/88	0.63	1.1	8	< 5	< 1	8	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 500	< 10

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	DIELDRIN (UG/KG)	ENDRIN (UG/KG)	TOTAL PHEENE (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/KG)
06/28/88	< 10	< 1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 500	< 10

340103080285435 TENN-TOM WATERWAY LOCK "A" POOL SEDIMENTATION RANGE IAA

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	DIELDRIN (UG/KG)	ENDRIN (UG/KG)	TOTAL PHEENE (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/KG)
06/28/88	1.2	< 0.1	14	< 5	< 1	13	20	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 500	< 10

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	DIELDRIN (UG/KG)	ENDRIN (UG/KG)	TOTAL PHEENE (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/KG)
06/28/88	< 10	33	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	37.7	28.4

0243010 MACKEYS CREEK NEAR MOORES MILL, MS

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	ALPHA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	DIELDRIN (UG/KG)	ENDRIN (UG/KG)	TOTAL PHEENE (UG/KG)	HEPTA-CHLOR EPOXIDE (UG/KG)		
06/27/88	METHOXY-CHLOR (UG/KG)	2,4-D PCB-1254 PCB-1260 PCB-1242 PCB-1221 PCB-1232 PCB-1248 PCB-1016 PCB-1016 (UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	60.2	58.4	10.7	6.1

TOWN CREEK NEAR NETTLETON, MS
12436500

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93.6 53.6 3.3 1.9

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INNOCENCE STOOD NEAR AMONG MC

HEPTA-
DIAZEPIN
UNIDOBLE RITMO ALAN MINOR / 10

	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	$P_i P^i DDT$	$P_i P^i ODD$	$P_i P^i DDE$	ALDRIN	BETA	DELTA	CHOR-	DIELDRIN	ENDRIN	EUDRIN	OXA-	PHENOL	CHLOR-	HEPA-	OXIDE	
GAMMA												BHC	BHC	BHC	DANE	DIELDRIN	ENDRIN	EUDRIN	OXADRIN	PHENOL	CHLOR-ADRENALINE	HEPATEX	OXIDE

(NG/G) (MNG/G) (NG/XG) (MNG/XG) (NG/YG) (MNG/YG) (NG/KG) (MNG/KG) (NG/GX) (MNG/GX) (NG/GY) (MNG/GY) (NG/KX) (MNG/KX) (NG/GK) (MNG/GK) (NG/YX) (MNG/YX) (NG/KY) (MNG/KY)

METHOXY-			
	ALPHA -	BETA -	ENDO -
	ENDO -	ENDO -	SULFAN
			SEDIMENT SEDIMENT SEDIMENT
			1 FINER 1 FINER 1 FINER 1 FINER

99.7% 99.8% 99.9% 14.2

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HEPA-
EPM - 100 WATERWAY ABERDEEN LAKE SEDIMENTATION RANGE 1A

(M6/G) (M6/XG) (M6/GS) (M6/XGS) (M6/KG) (M6/G/G) (M6/XG/G) (M6/KG/G) (M6/G/K) (M6/XG/K) (M6/G/S) (M6/XGS) (M6/KGS) (M6/G/G/S) (M6/XG/G/S) (M6/KG/G/S) (M6/G/K/S) (M6/XG/K/S) (M6/G/G/K) (M6/XG/G/K) (M6/KG/G/K) (M6/G/K/K) (M6/XG/K/K) (M6/G/G/K/G) (M6/XG/G/K/G) (M6/KG/G/K/G) (M6/G/K/K/G) (M6/XG/K/K/G) (M6/G/G/K/G/G) (M6/XG/G/K/G/G) (M6/KG/G/K/G/G)

ALPHA - BETA - ENDO - SEDIMENT SEDIMENT SEDIMENT

	PCB-125A	PCB-1260	PCB-1242	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	MERCURY	THAN	THAN	THAN
THEORY-	2,4-D	PCB-125A	PCB-1260	PCB-1242	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	MERCURY	THAN	THAN

TOMBIGBEE RIVER BELOW ABERDEEN LOCK AND DAM, MS
24437101

NEW COLUMBIA LAKE DUE DILIGENCE RIVER DREDGE SITE ZONE										SEDIMENT SEDIMENT SEDIMENT								
ELEMENT	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	P,P'DDT	P,P'DDD	P,P'DDE	ALDRIN	GAMMA	ALPHA	BETA	DELTA	CHLOR-	HEPTA-	
DATE	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	BHC	BHC	CHLOR-
6/6/29/88	3.1	< 0.1	29	6	< 1	13	42	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	PHEN	CHLOR	HEPTA-
																EPoxide	(UG/KG)	(UG/KG)

BUTTAHATCHEE RIVER NEAR KOKOLA SPRINGS, MS

02439660

06/29/88

TVA-25

	GAMMA BHC	BETA BHC	DELTA BHC	CHLOR- DANE	DELDRIN	ENDRIN	HEPA- TOXIN
	(16/16)	(16/16)	(16/16)	(16/16)	(16/16)	(16/16)	(16/16)
HEPTA- CHLOR- EPOX DE							

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3333119088291435 COLUMBUS LAKE SEDIMENTATION RANGE 1A

	GAMMA BHC (16/KG)	ALPHA BHC (16/KG)	BETA BHC (16/KG)	DELTA BHC (16/KG)	CHLOR- DANE (16/KG)	CHLOR- DANE (16/KG)	ENDRIN (16/KG)	ENDRIN (16/KG)	ALDEHYDE (16/KG)	ENDRIN (16/KG)	PHENOL (16/KG)	TOXA- BENE (16/KG)	HEPTA- CHLOR EPOXIDE (16/KG)
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06/29/88

02441391	TOMBIGEE RIVER BELOW COLUMBUS LOCK AND DAM, MS																									
SEDIMENT	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	P,P'DDT	P,P'DDE	ALDRIN	GAMMA	ALPHA	BETA	DELTA	CHLOR-	ENDRIN	TOXA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	CHLOR	EPOXIDE	
DATE	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(UG/KG)																		
07/25/88																										

METHOXY-	PCB-1254	PCB-1260	PCB-1262	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	HERCURY	THAN															
CHLOR	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)							
(UG/KG)																										

METHOXY-	PCB-1254	PCB-1260	PCB-1262	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	HERCURY	THAN															
CHLOR	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)							
(UG/KG)																										

02441498	TOMBIGEE RIVER (COL. BEND, 11B) AT COLUMBUS, MS																									
SEDIMENT	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	P,P'DDT	P,P'DDE	ALDRIN	GAMMA	ALPHA	BETA	DELTA	CHLOR-	ENDRIN	TOXA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	CHLOR	EPOXIDE	
DATE	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(UG/KG)																		
07/25/88	1.5	< 0.1	26	5	< 1	9	39	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10		

METHOXY-	PCB-1254	PCB-1260	PCB-1262	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	HERCURY	THAN															
CHLOR	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)							
(UG/KG)																										

METHOXY-	PCB-1254	PCB-1260	PCB-1262	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	HERCURY	THAN															
CHLOR	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)							
(UG/KG)																										

02443500	LUXAPALLA CREEK NEAR COLUMBUS, MS																									
SEDIMENT	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	P,P'DDT	P,P'DDE	ALDRIN	GAMMA	ALPHA	BETA	DELTA	CHLOR-	ENDRIN	TOXA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	HEPTA-	CHLOR	EPOXIDE	
DATE	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(UG/KG)																		
06/29/88																										

METHOXY-	PCB-1254	PCB-1260	PCB-1262	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN	SULFATE	HERCURY	THAN															
CHLOR	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)							
(UG/KG)																										

TOMBIGEE RIVER ABOVE ALICEVILLE LOCK AND DAM, AL										HEPA-CHLOR EPOXIDE										
SEDIMENT DATE	ARSENIC	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	ZINC	P, P'DDT	P, P'DDD, P,P'DDE	ALDRIN	GAMMA	ALPHA	BETA	CHLOR-DANE	DELTA	CHLOR-BHC	DELDRIN	ENDRIN	TOKA-PHENYL	
0244158	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(MG/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)	(US/KG)
07/25/88	0.76	< 0.1	12	< 5	< 1	9	13	10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 500	< 10

TVA-27

TVA-28

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	CHROMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P, P' 'DDT (UG/KG)	P, P' 'DDOE (UG/KG)	ALDRIN (UG/KG)	HEXA- CHLOR- BHC (UG/KG)	BETA (UG/KG)	DELTA BHC (UG/KG)	CHLOR- DANE (UG/KG)	HEPAT- ALDRIN (UG/KG)	PHENE ALDEHYDE (UG/KG)	EPOXYDINE (UG/KG)
07/25/88	1.3 < 0.1	17 < 5	< 1	15 < 15	26 < 16	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 500 < 10	< 10 < 10

TOMBIGEE RIVER AT GAINESVILLE, AL

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDD (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	ENDRIN (UG/KG)	ALDEHYDE (UG/KG)	TOXA-PHENOL (UG/KG)	HEPTA-CHLOR-EPOXIDE (UG/KG)
07/25/88																		

METHOXY-CHLOR (UG/KG)	PCB-1254	PCB-1260	PCB-1242	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN (UG/KG)									
(UG/KG)	2,4-D																

99.8 98.6 21.4 14

TOMBIGEE RIVER ABOVE DEMOPOLIS LOCK AND DAM, AL

SEDIMENT DATE	ARSENIC (MG/KG)	CADMIUM (MG/KG)	COBALT (MG/KG)	COPPER (MG/KG)	LEAD (MG/KG)	ZINC (MG/KG)	P,P'DDT (UG/KG)	P,P'DDD (UG/KG)	P,P'DDE (UG/KG)	ALDRIN (UG/KG)	GAMMA BHC (UG/KG)	BETA BHC (UG/KG)	DELTA BHC (UG/KG)	CHLOR-DANE (UG/KG)	ENDRIN (UG/KG)	ALDEHYDE (UG/KG)	TOXA-PHENOL (UG/KG)	HEPTA-CHLOR-EPOXIDE (UG/KG)
07/25/88 DUPLICATE	0.78 < 0.1 0.68 < 0.1	6 5	< 5 < 5	1 1	10 8	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10	< 10 < 10

METHOXY-CHLOR (UG/KG)	PCB-1254	PCB-1260	PCB-1242	PCB-1221	PCB-1232	PCB-1248	PCB-1016	SULFAN (UG/KG)									
(UG/KG)	2,4-D																

99.9 98.4 17.3 12.3
 99.8 98.6 17.2 12.3

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

PHYTOPLANKTON DENSITIES

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1986

	CROSS ROADS MS		APR 11 JUNE 27		LOCK D POOL							
	APR 11	JUNE 27	L & D	BL BAY SPRINGS LAKE	BL BAY SPRINGS L & D	JUNE 27						
Chlorophyta												
<i>Acanthosphaera</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Actinastrum</i>	130,704	24,896	24,896	0	37,344	0	0	0	0	0	0	0
<i>Ankistrodesmus</i>	0	6,224	15,560	15,560	0	0	0	0	0	0	24,896	0
<i>Chlamydomonas</i>	0	0	0	0	0	0	0	0	0	0	52,904	0
<i>Chlorella</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Chodatella</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Closteriopsis</i>	0	6,224	0	0	0	0	0	0	0	0	0	0
<i>Coelastrium</i>	0	0	0	0	0	0	0	0	0	0	56,016	0
<i>Cosmarium</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Crucigenia</i>	0	0	0	0	12,448	0	0	0	0	6,224	0	0
<i>Dicyosphaerium</i>	65,352	80,912	0	0	12,448	0	0	0	0	12,448	68,464	0
<i>Elatotethrix</i>	0	0	0	0	0	0	0	0	0	0	43,566	0
<i>Euastrum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eudorina</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gloeoactinium</i>	0	12,448	0	0	0	0	0	0	0	0	0	0
<i>Golenkinia</i>	0	0	0	0	3,112	0	0	0	0	0	0	0
<i>Gonium</i>	0	0	0	0	0	0	0	0	0	0	18,672	0
<i>Kirchneriella</i>	0	21,784	0	0	0	0	0	0	0	0	0	0
<i>Oocystis</i>	12,448	0	0	0	24,896	0	0	0	0	6,224	0	0
<i>Pandorina</i>	0	49,792	0	0	0	0	0	0	0	0	0	0
<i>Pediastrum</i>	0	24,896	0	0	0	0	0	0	0	0	0	0
<i>Platydorina</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pteromonas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pyramimonas</i>	37,344	186,720	12,448	62,240	3,112	18,672	18,672	0	0	133,816	180,496	0
<i>Scenedesmus</i>	0	3,112	0	0	0	0	0	0	0	0	0	0
<i>Schroederia</i>	0	0	0	0	0	0	0	0	0	0	15,560	0
<i>Staurastrum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Tetrasstrum</i>	0	3,112	0	3,112	0	0	0	0	0	0	0	0
<i>Treubaria</i>	0	0	0	0	0	0	0	0	0	0	0	0
Total	245,848	420,120	65,352	136,928	24,896	143,152	180,496	603,728				
Chrysophyta												
<i>Achnanthus</i>	0	31,120	0	0	0	0	0	0	0	0	12,448	43,566
<i>Asterionella</i>	248,960	0	77,800	0	0	31,120	0	0	0	0	404,560	0
<i>Attheya</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Chaetoceros</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cyphella</i>	0	0	0	0	0	0	0	0	0	0	118,236	0
<i>Dinobryon</i>	161,824	40,456	3,112	6,224	0	0	0	0	0	34,232	759,328	0
<i>Fragilaria</i>	0	0	0	0	0	0	0	0	0	0	59,128	0
<i>Gyrosigma</i>	504,144	164,936	37,344	0	0	0	0	0	0	0	0	0
<i>Mesira</i>	24,896	3,112	0	0	9,336	0	0	0	0	74,668	799,784	0
<i>Navicula</i>	0	0	0	0	0	0	0	0	0	43,566	0	0
<i>Nitzschia</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ophiocytium</i>	0	0	0	0	0	0	0	0	0	0	0	0

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988 --- Continued

	CROSS ROADS		BAY SPRINGS		BL BAY SPRINGS		LOCK D POOL	
	APR 11	JUNE 27	APR 11		JUNE 27		APR 11	
			L	D	L	D	L	D
Pleurosigma	6,224	0	0	0	0	0	0	0
Rhizosolenia	0	0	18,672	0	0	0	6,224	0
Rhoicosphenia	0	0	0	0	0	0	62,240	0
Stephanodiscus	3,112	0	0	34,232	6,224	24,896	9,336	6,224
Synedra	68,464	65,352	0	18,672	3,112	9,336	71,576	40,456
Total	1,017,624	304,976	136,928	59,128	87,136	80,912	1,5556,000	964,720
 cryptophyta								
Cryptomonas	0	6,224	12,448	9,336	9,336	3,112	21,784	31,120
Total	0	6,224	12,448	9,336	9,336	3,112	21,784	31,120
 cyanophyta								
Anabaena	155,600	0	115,144	99,584	136,928	62,240	127,592	180,496
Anacystis	0	245,848	0	24,896	0	0	31,120	49,920
Merismopedia	348,544	448,128	0	522,116	0	0	149,376	731,320
Oscillatoriaria								2,190,848
Total	504,144	809,120	99,584	684,640	62,240	308,088	180,496	3,871,328
 Euglenophyta								
Cryptotilapia	6,224	0	0	6,224	0	0	3,112	3,112
Euglena	0	0	0	0	0	0	0	0
Phacus	0	18,672	0	15,560	0	0	9,336	0
Trachelomonas	0							34,232
Total	6,224	18,672	6,224	15,560	3,112	12,448	3,112	49,792
 Pyrophyta								
Ceratium	0	3,112	0	9,336	0	3,112	0	0
Gymnodinium	0	9,336	0	3,112	0	0	0	12,448
Peridinium	0	0	0	0	0	0	0	0
Total	0	12,448	0	12,448	0	3,112	0	12,448

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1968

	LOCK A POOL		ABERDEEN LAKE		BELOW ABERDEEN L & D		BUTTER RIVER BENDWAY	
	APR 12	JUNE 26	APR 12	JUNE 26	APR 12	JUNE 26	APR 13	JUNE 29
Chlorophyta								
<i>Acanthophaea</i>	0	0	0	0	12,446	0	0	0
<i>Actinastrium</i>	34,232	56,016	62,240	21,784	9,584	0	24,896	0
<i>Ankistrodesmus</i>	0	0	0	0	37,344	43,568	34,232	18,672
<i>Chlamydomonas</i>	0	0	0	0	0	0	0	31,120
<i>Chlorella</i>	0	0	0	0	0	0	0	0
<i>Chodatella</i>	0	0	9,336	0	0	0	0	0
<i>Closteriopsis</i>	0	0	0	0	68,464	0	0	0
<i>Coelastrum</i>	0	0	0	0	0	0	0	0
<i>Cosmarium</i>	0	0	62,240	77,800	112,032	65,352	65,352	56,016
<i>Crucigenia</i>	0	149,376	0	31,120	46,680	71,576	0	87,136
<i>Dictyosphaerium</i>	0	12,448	0	0	0	0	12,448	0
<i>Elatakotothrix</i>	0	0	0	0	0	0	0	37,344
<i>Fusarium</i>	0	0	0	99,584	0	0	0	0
<i>Eudorina</i>	0	0	0	0	0	0	0	0
<i>Gloeococcinum</i>	0	0	0	0	6,224	0	0	43,568
<i>Golenkinia</i>	0	0	9,336	0	0	0	0	0
<i>Gonium</i>	0	0	0	0	0	0	0	49,792
<i>Kirchneriella</i>	0	21,784	0	0	12,446	12,446	49,792	0
<i>Oocystis</i>	0	12,448	0	0	18,672	0	12,448	49,792
<i>Pandorina</i>	0	0	0	0	0	0	49,792	0
<i>Pediastrum</i>	0	49,792	12,448	0	24,896	0	62,240	0
<i>Platydorina</i>	0	0	0	0	0	0	0	0
<i>Pteromonas</i>	0	0	0	0	0	0	0	0
<i>Pyrannina</i>	28,008	217,840	93,360	261,408	146,244	298,752	168,048	317,424
<i>Scenedesmus</i>	0	0	0	12,448	0	0	0	12,448
<i>Schroederia</i>	0	0	0	9,336	6,224	0	6,224	0
<i>Staurastrum</i>	0	0	0	0	0	0	0	0
<i>Tetrasira</i>	0	0	0	0	0	0	0	0
<i>Treubaria</i>	0	0	0	0	0	0	0	0
Total	62,240	662,856	314,312	703,312	314,312	802,896	317,424	871,360
Chrysophyta								
<i>Achnanthes</i>	0	9,336	0	12,446	0	0	0	24,896
<i>Asterionella</i>	0	0	31,120	0	0	0	0	0
<i>Athaea</i>	0	0	0	0	0	0	0	0
<i>Chaetoceros</i>	0	0	0	0	0	0	0	0
<i>Cymbella</i>	0	0	31,120	0	0	0	0	0
<i>Dinobryon</i>	40,456	0	0	0	0	9,336	0	18,672
<i>Fragliaria</i>	46,680	205,392	99,584	1,026,960	0	3,112	0	0
<i>Gyrosigma</i>	31,120	37,344	9,336	6,224	130,704	1,584,008	168,048	1,976,120
<i>Melosira</i>	0	0	0	0	0	9,336	12,448	40,456
<i>Navicula</i>	0	0	0	0	0	0	0	0
<i>Nitzschia</i>	0	0	0	0	0	12,446	0	0
<i>Ophiocytium</i>	0	0	0	0	0	0	0	0

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1988 --- Continued

	LOCK A		ABERDEEN		BUTTA RIVER		BENDWAY	
	POOL		LAKE		L & D		APR 13	
	APR 12	JUNE 26	APR 12	JUNE 26	APR 12	JUNE 26	JUNE 29	
Pleurosigma	0	0	0	0	0	0	0	0
Rhizosolenia	0	6,224	0	0	0	0	0	0
Rhoicosphenia	0	0	0	0	0	0	0	0
Stephanodiscus	0	0	24,896	0	15,560	0	37,344	
synedra	12,448	84,024	15,560	115,144	18,672	115,144	3,112	17,160
Total	130,704	379,664	155,600	1,185,672	174,272	1,724,048	202,280	2,249,976
 cryptophyta	 	 	 	 	 	 	 	
Cryptomonas	6,224	12,448	15,560	12,448	6,224	9,336	9,336	18,672
Total	6,224	12,448	15,560	12,448	6,224	9,336	9,336	18,672
 Cyanophyta	 	 	 	 	 	 	 	
Anabaena	74,688	105,808	46,680	46,680	59,128	220,952	62,240	410,784
Anacyclis	0	706,424	0	476,136	0	267,632	155,600	227,176
Merismopedia	0	230,288	0	20,280	0	360,992	0	19,944
Oscillatoriæ	0	1,468,864	0	1,543,552	0	1,468,864	0	1,294,592
Total	74,688	2,511,384	46,680	2,221,968	59,128	2,318,440	217,840	2,125,496
 Euglenophyta	 	 	 	 	 	 	 	
Cryptoglena	0	0	0	0	0	0	0	0
Euglena	9,336	18,672	24,896	56,016	18,672	56,016	37,344	80,912
Phacus	0	0	0	0	0	3,112	0	9,336
Trachelomonas	0	12,448	9,336	18,672	18,672	74,688	18,672	9,336
Total	9,336	31,120	34,232	74,688	37,344	133,816	56,016	99,584
 Pyrrrophyta	 	 	 	 	 	 	 	
Ceratium	0	6,224	0	6,224	0	3,112	0	6,224
Gymnodinium	0	9,336	0	9,336	0	12,448	0	6,224
Peridinium	0	0	0	0	0	6,224	0	12,448
Total	0	15,560	0	15,560	0	21,784	0	24,896

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988

	BELOW COLUMBUS				COLUMBUS				PRATT CAMP			
	LAKE		JUNE 29		L & D		APR 18		BENDWAY		BENDWAY	
	APR 13	JUNE 29	APR 18	JULY 11	APR 18	JULY 11	APR 18	JULY 11	APR 18	JULY 11	APR 18	JULY 11
Chlorophyta												
<i>Acanthophora</i>	0	0	0	0	0	0	0	0	12,448	0	0	0
<i>Actinostrium</i>	0	15,560	37,344	49,792	62,240	74,688	24,896	24,896	68,464	37,344	0	0
<i>Ankistrodesmus</i>	12,448	49,792	0	0	0	3,112	15,560	0	46,680	0	0	0
<i>Chlamydomonas</i>	3,112	0	0	0	0	0	0	0	0	0	0	0
<i>Chlorella</i>	0	0	0	0	6,224	0	0	12,448	0	0	21,784	0
<i>Chodatella</i>	0	0	0	0	0	0	0	0	0	0	0	24,896
<i>Closteriopsis</i>	0	0	0	0	49,792	0	0	56,016	0	0	74,688	0
<i>Coelastrum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cosmarium</i>	0	93,360	71,576	90,248	0	0	0	0	0	0	0	0
<i>Crucigonia</i>	12,448	77,800	0	40,456	24,896	171,160	0	0	0	0	320,536	0
<i>Dictyosphaerium</i>	0	0	0	0	0	152,488	0	0	0	0	62,240	0
<i>Elatokatotrichix</i>	0	0	0	0	0	0	12,448	0	0	0	0	18,672
<i>Euastrum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eudorina</i>	0	0	99,584	0	0	0	0	0	0	0	0	0
<i>Gloeocacticinium</i>	0	127,592	0	118,256	0	0	71,576	0	0	0	152,488	0
<i>Golenkinia</i>	0	0	0	6,224	0	0	0	0	0	0	0	0
<i>Gonium</i>	49,792	49,792	0	0	0	0	0	0	0	0	0	99,584
<i>Kirchneriella</i>	0	71,576	0	37,344	0	0	102,696	0	49,792	0	96,472	0
<i>Oocystis</i>	0	24,896	0	12,448	0	0	24,896	0	0	0	24,896	0
<i>Pandorina</i>	0	49,792	0	0	0	0	99,584	0	0	0	99,584	0
<i>Pediastrum</i>	0	0	43,568	49,792	0	0	0	0	124,480	0	199,168	0
<i>Platydorina</i>	0	99,584	0	0	0	0	49,792	0	0	0	99,584	0
<i>Pteromonas</i>	0	0	0	6,224	0	0	0	0	0	0	0	0
<i>Pyramimonas</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Scenedesmus</i>	276,968	342,320	52,904	0	130,704	0	236,512	93,360	0	0	205,392	0
<i>Schroederia</i>	0	31,120	0	12,448	0	0	21,784	0	0	0	12,448	0
<i>Staurastrum</i>	0	0	0	6,224	0	0	0	0	0	0	6,224	0
<i>Tetrastrum</i>	0	0	0	0	0	0	0	0	0	0	12,448	0
<i>Treubaria</i>	0	0	0	0	0	0	0	6,224	0	0	0	0
Total	354,768	1,033,184	304,976	497,920	220,952	1,173,224	354,768	1,646,248				
Chrysophyta												
<i>Achnanthes</i>	0	15,560	0	0	0	0	0	0	0	0	0	0
<i>Asterionella</i>	52,904	0	0	0	0	0	24,896	0	0	0	0	0
<i>Athaea</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Chetoceros</i>	0	0	0	0	0	0	34,232	0	0	124,480	0	0
<i>Cymbella</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinobryon</i>	40,456	0	0	0	0	0	0	0	0	0	34,232	0
<i>Fragilaria</i>	0	0	0	0	0	0	0	0	0	0	34,232	0
<i>Gyrosigma</i>	0	1,453,304	566,384	541,488	802,896	1,465,752	0	0	0	0	0	0
<i>Melosira</i>	6,224	9,336	21,784	21,784	18,672	21,784	0	0	1,615,128	435,680	0	0
<i>Navicula</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nitzschia</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ophiocytium</i>	0	0	0	0	0	0	0	0	0	0	0	0

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEWATERWAY, 1966 -- Continued

	BELOW COLUMBUS				COLUMBUS BENDWAY				PRATT CAMP BENDWAY				
	APR 13		JUNE 29		APR 16		JULY 11		APR 16		JULY 11		
	LAKE	L & D	L & D	L & D	APR 16	JULY 11	APR 16	JULY 11	APR 16	JULY 11	APR 16	JULY 11	
Pleurosigma	0	0	0	0	0	0	0	0	0	0	0	0	
Rhizosolenia	0	0	0	0	0	0	0	0	0	0	0	0	
Rhoicosphenia	0	0	0	0	0	0	0	0	0	0	0	0	
Stephanodiscus	0	65,352	0	40,456	0	0	220,952	0	43,568	0	43,568	0	
Synedra	6,224	136,928	56,016	99,584	49,792	0	227,176	71,576	71,576	0	71,576	0	
Total	687,752	1,660,480	644,184	703,312	930,468	1,935,664	1,845,416	1,845,416	585,056	0	585,056	0	
Cryptophyta	9,336	52,904	9,336	18,672	12,448	18,672	59,128	59,128	34,232	0	34,232	0	
Cryptomonas	Total	9,336	52,904	9,336	18,672	12,448	18,672	59,128	59,128	34,232	0	34,232	0
Cyanophyta	43,568	451,240	52,904	68,464	62,240	255,184	43,568	43,568	547,712	0	547,712	0	
Anabaena	0	264,520	56,016	99,884	115,144	578,832	0	0	687,752	0	687,752	0	
Anacyctis	0	267,632	0	217,840	0	662,856	24,896	24,896	1,207,456	0	1,207,456	0	
Merismopedia	0	1,070,528	0	746,180	0	1,319,488	0	0	1,817,408	0	1,817,408	0	
Oscillatoriida	Total	43,568	2,053,920	108,920	1,132,768	177,384	2,816,360	68,464	4,260,328	0	4,260,328	0	
Euglenophyta													
Cryptoglena	26,008	93,360	16,672	21,784	56,016	169,832	124,480	124,480	155,600	0	155,600	0	
Euglena	0	15,560	0	0	0	9,336	12,448	12,448	31,120	0	31,120	0	
Phacus	3,112	21,784	6,224	9,336	0	65,352	52,904	52,904	65,352	0	65,352	0	
Trachelomonas	Total	31,120	130,704	24,896	31,120	56,016	264,520	189,832	252,072	0	252,072	0	
Pyrrrophyta													
Ceratium	0	12,448	0	9,336	0	9,336	24,896	24,896	6,224	0	6,224	0	
Gymnodinium	0	6,224	0	6,224	18,672	0	0	0	15,560	0	15,560	0	
Peridinium	0	9,336	0	0	0	0	0	0	9,336	0	9,336	0	
Total	0	26,008	0	15,560	18,672	34,232	21,784	21,784	31,120	0	31,120	0	

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1968

	ABOVE ALICEVILLE		BELOW ALICEVILLE		BIG CREEK		COOKS BENDWAY		BENDWAY	
	L & D		L & D		APR 19		APR 19		APR 19	
	JULY 12		JULY 12		JULY 12		JULY 12		JULY 12	
Chlorophyta										
<i>Acanthosphaera</i>	0	0	0	0	0	0	0	0	0	0
<i>Acinastrum</i>	62,240	0	65,352	37,144	0	0	59,128	18,672	21,784	0
<i>Ankistrodesmus</i>	40,456	84,024	68,464	40,456	56,016	65,352	24,896	74,688	77,800	0
<i>Chlamydomonas</i>	0	52,904	0	40,556	0	49,792	0	0	21,784	0
<i>Chlorella</i>	0	15,560	0	9,336	0	15,560	0	0	6,224	0
<i>Chodatella</i>	0	0	0	6,224	0	12,448	0	0	0	0
<i>Closteriopsis</i>	0	0	0	0	0	0	0	0	49,792	0
<i>Coolstrum</i>	0	24,896	0	46,680	0	74,688	0	0	0	0
<i>Comarium</i>	0	0	0	326,760	0	0	0	0	0	0
<i>Crucigenia</i>	12,448	220,952	0	74,688	395,224	49,792	289,416	0	0	0
<i>Dactyospherium</i>	0	62,240	65,352	68,164	0	124,480	12,448	93,360	0	0
<i>Elakatothrix</i>	0	0	0	0	0	0	24,896	0	0	0
<i>Eustrum</i>	0	18,672	0	12,448	0	0	31,120	0	12,448	0
<i>Eudorina</i>	0	0	0	0	0	0	0	0	0	0
<i>Gloeocanthium</i>	0	180,496	0	140,040	0	161,824	0	0	158,712	0
<i>Golenkinia</i>	0	9,336	0	9,336	0	21,784	0	0	15,560	0
<i>Gonium</i>	0	24,896	0	49,92	0	99,584	0	0	130,704	0
<i>Kirchneriella</i>	0	46,680	0	74,688	0	118,256	0	0	74,688	0
<i>Oocystis</i>	0	31,120	0	12,448	0	37,344	0	0	12,448	0
<i>Pandorina</i>	0	99,584	0	99,584	0	99,584	0	0	99,584	0
<i>Pediastrum</i>	0	74,688	99,584	0	0	0	0	0	99,584	0
<i>Platydorina</i>	0	99,584	0	49,792	0	99,584	0	0	99,584	0
<i>Pteromonas</i>	0	0	0	6,224	0	18,672	0	0	9,336	0
<i>Pyramimonas</i>	0	15,560	0	0	0	0	0	0	0	0
<i>Schondesmus</i>	56,016	329,872	74,688	367,216	320,536	445,016	143,152	557,048	0	0
<i>Schroederia</i>	0	40,456	0	21,784	0	15,560	0	0	43,568	0
<i>Sturastrum</i>	9,336	0	0	0	0	0	0	0	18,672	0
<i>Tetrastrum</i>	0	0	0	0	0	0	0	0	24,896	0
<i>Treubaria</i>	0	0	0	0	0	0	0	0	0	0
Total	180,496	1,431,520	373,440	1,419,072	451,240	1,969,896	248,960	1,991,660	0	0
Chrysophyta										
<i>Achnanthes</i>	0	0	0	0	0	0	0	0	0	0
<i>Asttrioneilla</i>	90,248	0	24,896	0	0	49,792	31,120	24,896	0	0
<i>Attheya</i>	0	0	0	6,224	0	0	0	0	6,224	0
<i>Chaetoceros</i>	0	0	15,560	0	31,120	40,456	24,896	74,688	0	0
<i>Cybellla</i>	0	0	0	0	9,336	6,224	0	0	0	0
<i>Dinobryon</i>	0	0	0	0	0	31,120	43,568	0	0	0
<i>Fragilaria</i>	0	0	0	0	0	46,680	0	0	0	0
<i>Gyrosigma</i>	756,216	1,067,416	983,392	1,142,104	6,224	127,592	1,587,120	893,144	6,224	0
<i>Helosira</i>	9,336	40,456	0	9,336	52,904	31,120	0	1,605,792	0	0
<i>Navicula</i>	0	0	0	0	0	0	0	0	0	0
<i>Nitzschia</i>	0	0	0	0	0	0	0	0	0	0
<i>Ophiocytium</i>	0	0	0	0	3,112	0	0	0	0	0

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEWATERWAY, 1988 --- Continued

	ABOVE ALICEVILLE		BELOW ALICEVILLE L & D		BIG CREEK BENDWAY		COOKS BIG CREEK BENDWAY	
	APR 19		JULY 12		APR 19		JULY 12	
Pleurosigma	0	0	0	0	0	0	0	0
Rhizosolenia	0	0	0	0	21,784	9,336	0	21,784
Rhoicosphenia	0	0	0	0	0	0	0	0
Stephanodiscus	0	152,488	0	115,144	3,112	133,816	12,448	171,160
Synedra	31,120	87,136	31,120	52,004	121,368	93,360	26,008	158,712
Total	886,920	1,347,496	1,054,968	1,325,712	407,672	2,047,696	989,616	2,069,480
Cryptophyta								
Cryptomonas	21,784	34,232	18,672	24,896	18,672	34,232	18,672	37,344
Total	21,784	34,232	18,672	24,896	18,672	34,232	18,672	37,344
Cyanophyta								
Anabaena	0	304,976	0	239,624	0	326,760	0	364,104
Anacystis	0	706,424	0	507,256	0	597,504	0	914,928
Merismopedia	12,448	600,616	80,912	563,272	24,896	653,520	12,448	921,152
Oscillatoriaria	0	2,066,368	99,584	1,493,160	0	2,240,640	0	2,066,368
Total	12,448	3,678,384	180,496	2,803,912	24,896	3,818,424	12,448	4,266,552
Euglenophyta								
Cryptoglena	0	6,224	0	6,224	0	18,672	0	0
Euglena	12,448	168,048	34,232	149,176	34,232	164,936	15,560	295,640
Phacus	0	15,560	0	6,224	0	18,672	0	34,232
Trachelomonas	15,560	43,568	31,120	71,576	6,224	90,248	12,448	90,248
Total	28,008	233,400	65,352	233,400	40,456	292,528	28,008	420,120
Pyrrrophyta								
Ceratium	0	9,336	0	0	6,224	9,336	0	0
Gymnodinium	12,448	15,560	12,448	9,336	12,448	6,224	12,448	21,784
Peridinium	0	0	0	0	0	6,224	0	12,448
Total	12,448	24,896	12,448	9,336	12,448	21,784	12,448	34,232

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, 1968

	ABOVE GAINESVILLE			GAINES- VILLE AL			ABOVE DEMOPOLIS		
	APR 20	JULY 13	L E D	APR 20	JULY 13	L E D	APR 20	JULY 13	L E D
Chlorophyta									
Acanthosphaera	0	0	0	43,568	24,896	0	87,136	68,464	0
Actinastrum	18,672	34,232	0	31,120	9,336	71,776	96,172	28,008	0
Ankistrodesmus	56,016	40,456	0	3,112	0	9,336	0	0	0
Chlamydomonas	21,784	21,784	0	0	0	0	0	0	0
Chlorella	0	6,224	0	0	0	0	0	0	0
Chodatella	0	12,448	0	0	0	0	0	6,224	0
Closteriopsis	0	12,448	0	6,224	0	0	0	0	0
Coelastrum	24,896	24,896	0	0	0	0	0	24,896	0
Cosmatium	0	0	0	0	0	0	0	0	0
Cruciginea	0	68,464	12,448	56,016	37,344	87,136	68,464	0	0
Dactylophaerium	77,800	59,128	24,896	0	31,120	68,464	0	0	0
Elatiakostrix	3,0	12,448	0	0	0	0	0	0	0
Euastrum	3,112	0	0	0	0	0	0	0	0
Eudorina	0	0	0	99,584	46,680	0	0	0	56,016
Gloeoactinium	0	71,576	0	0	0	0	0	0	0
Golenkinia	0	12,448	0	0	0	0	0	0	0
Gonium	0	0	0	99,584	0	0	49,792	0	0
Kirchneriella	0	52,904	0	0	0	0	0	0	0
Oocystis	0	12,448	0	0	0	0	0	0	0
Pandorina	0	0	0	49,792	99,584	0	99,584	99,584	0
Pediastrum	0	74,688	99,584	0	0	0	0	0	0
Platygörina	0	49,792	0	0	0	0	0	49,792	0
Pteromonas	0	6,224	0	0	0	0	0	0	0
Pyramimonas	0	0	0	0	0	0	0	0	0
Schenedesmus	136,928	239,624	74,688	149,376	99,584	0	317,424	12,448	0
Schroederia	0	9,336	0	9,336	0	0	0	0	0
Staurastrum	0	12,448	0	6,224	0	0	0	0	0
Tetrasstrum	0	0	0	0	0	0	0	0	0
Treubaria	0	0	0	0	0	0	0	0	0
Total	339,208	834,016	445,016	501,032	435,680	1,064,304			
Chrysophyta									
Achnanthes	0	0	0	0	0	0	0	0	0
Asterionella	93,360	24,896	24,896	0	0	0	152,488	0	0
Athyra	0	0	0	0	0	0	0	0	0
Chaetoceros	43,568	56,016	0	0	0	0	46,680	0	0
Cymbella	0	0	0	0	0	0	0	0	0
Dinobryon	0	0	0	0	0	0	0	0	0
Fragilaria	0	0	0	0	0	0	0	0	0
Gyrosigma	1,562,224	924,264	1,313,264	392,112	1,247,912	0	743,768	0	0
Melosira	0	12,448	3,112	24,696	28,008	0	0	0	0
Navicula	0	0	0	0	0	0	0	0	0
Nitzschia	0	0	0	0	0	0	0	0	0
Ophiocytium	0	0	0	0	0	0	0	0	0

PHYTOPLANKTON DENSITIES (NUMBER/LITER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 -- Continued

	ABOVE GAINESVILLE		GAINES- VILLE AL		ABOVE DEMOPOLIS	
	APR 20 L & D	JULY 13 L & D	APR 20 L & D	JULY 13 L & D	APR 20 L & D	JULY 13 L & D
Pleurosigma	0	0	0	0	0	0
Rhizosolenia	0	6,224	0	0	0	0
Rhoicosphenia	0	0	0	0	0	0
Stephanodiscus	21,784	118,256	21,784	12,446	87,136	118,256
Synedra	28,008	80,912	31,120	12,446	105,808	46,680
Total	1,748,944	1,223,016	1,394,176	441,904	1,668,032	908,704
Cryptophyta						
Cryptomonas	21,784	28,008	12,448	21,784	18,672	24,896
Total	21,784	28,008	12,448	21,784	18,672	24,896
Cyanophyta						
Anabaena	31,120	199,168	0	77,800	24,896	152,468
Anacyctis	0	684,640	0	0	0	289,416
Merismopedia	0	360,992	68,464	118,256	37,344	466,800
Oscillatoria	0	1,443,968	0	199,168	0	1,070,528
Total	31,120	2,688,768	68,464	395,224	62,240	1,979,232
Euglenophyta						
Cryptoglena	0	0	0	0	0	0
Euglena	15,560	71,576	34,232	52,904	12,448	93,360
Phacus	0	9,336	0	6,224	0	0
Trachelomonas	43,568	31,120	21,784	12,446	6,224	49,792
Total	59,128	112,032	56,016	71,576	18,672	143,152
Pyrrrophyta						
Ceratium	0	0	0	0	0	0
Gymnodinium	9,336	12,448	9,336	12,448	12,448	12,448
Peridinium	0	9,336	0	0	0	0
Total	9,336	21,784	9,336	12,448	12,448	12,448

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

ZOOPLANKTON DENSITIES

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988

	CROSS ROADS MS	JUNE 27	APRIL 14	JUNE 27	APRIL 11	JUNE 27	APRIL 11	JUNE 27	APRIL 11	JUNE 27	LOCK D POOL
Cladocera											
<i>Alona quadrangularis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Alona rectangula</i>	0	165	0	0	0	0	0	0	0	0	0
<i>Bosmina longirostris</i>	132,950	0	1,322	695	637	162,330	122	37,850	0	0	714
<i>Centrodaephnia lacustris</i>	0	0	0	0	0	2,820	0	2,290	0	0	0
<i>Chydorus sp.</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Daphnia ambigua</i>	0	0	695	0	0	6,580	0	0	0	0	0
<i>Daphnia parvula</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Daphnia retrocurva</i>	0	1,157	7,183	637	10,340	659	3,440	0	0	0	268
<i>Diaphanosoma leuchtenbergianum</i>	3,850	826	3,939	778	4,700	171	0	0	0	0	357
<i>Holopedium gibberum</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Rivocryptus spinifer</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Leptodora kindtii</i>	0	496	0	0	0	0	0	0	0	0	0
<i>Moina micrura</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Moina minuta</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Sida crystallina</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Simocephalus serrulatus</i>	0	165	0	0	0	0	0	0	0	0	0
Total	136,860	4,131	12,512	2,689	206,770	952	43,580	1,339			
Copepoda											
<i>Calanoid imm.</i>	960	331	232	1,911	0	269	1,150	179			
<i>Cyclopoid imm.</i>	7,710	2,149	12,975	3,751	31,960	977	9,170	1,250			
<i>Cyclops bicuspidatus thomasi</i>	1,930	0	463	71	1,880	0	2,290	0			
<i>Cyclops veroralis</i>	1,930	351	463	71	5,640	0	2,290	0			
<i>Diaptomus pallidus</i>	0	0	0	232	212	0	146	0			
<i>Diaptomus reighardi</i>	0	165	232	637	0	366	0	179			
<i>Epischura fluviatilis</i>	0	0	0	0	0	220	0	89			
<i>Epischura sp.</i>	0	0	0	212	0	0	0	0			
<i>Ergasilus imm.</i>	0	0	0	0	0	0	0	0			
<i>Mesocyclops edax</i>	960	0	0	849	0	98	0	0			
<i>Neupili</i>	7,710	34,380	8,804	7,431	25,380	1,514	6,880	7,679			
<i>Tropocyclops prasinus</i>	0	0	232	71	0	0	0	268			
Total	21,200	37,376	23,401	15,216	64,860	3,590	21,780	9,644			
Rotifera											
<i>Asplinchna herricki</i>	3,850	331	0	142	0	0	0	1,150	1,607		
<i>Brachionus angularis</i>	0	1,818	0	71	0	98	0	0	2,946		
<i>Brachionus bennini</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus bidensata</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus budapestinensis</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus calyciflorus</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus caudatus</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus havanensis</i>	0	0	0	0	0	0	0	0	0		
<i>Brachionus quadridentatus</i>	0	0	0	0	0	0	0	0	0		

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 -- Continued

	CROSS ROADS MS	JUNE 27	APRIL 14	BAY SPRINGS LAKE	JUNE 27	APRIL 11	JUNE 27	BL BAY SPRINGS L & D	JUNE 27	LOCK D POOL	JUNE 27
	APRIL 11										
<i>Brachionus urceolaris</i>	0	0	0	0	71	940	0	0	0	0	0
<i>Colitheca</i> sp.	0	0	0	0	283	0	0	0	3,440	0	0
<i>Conochiloides</i> sp.	0	165	0	43,095	354	74,250	0	0	4,590	3,482	3,482
<i>Conochilus unicornis</i>	509,630	0	0	0	0	0	0	0	714,450	0	0
<i>Ephaphanes macrourus</i>	0	0	0	0	0	0	0	0	3,440	0	0
<i>Filinia longisetata</i>	0	0	0	0	0	0	0	0	1,150	268	0
<i>Hearthra intermedia</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Kelicottia bostoniensis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Kelicottia longispina</i>	1,930	0	0	0	0	0	0	0	0	0	0
<i>Keratella cochlearis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Keratella crassa</i>	0	165	0	0	0	0	0	0	146	1,150	0
<i>Keratella earlianae</i>	0	0	2,085	637	3,760	220	0	0	6,880	16,607	0
<i>Keratella quadrata</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Keratella valga</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Lecane</i> sp.	0	0	0	0	0	0	0	0	0	0	0
<i>Platyias patulus</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Platyias quadricornis</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Poecosoma hudsoni</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Ploesoma truncata</i>	960	0	0	0	212	0	0	0	146	0	357
<i>Polyarthra</i> sp.	0	0	0	0	8,846	0	0	0	781	2,290	357
<i>Rotifera</i>	0	0	0	0	0	0	0	0	0	0	0
<i>Synchaeta</i> sp.	1,930	2,479	1,158	1,699	0	0	0	0	0	0	0
<i>Synchaeta stylata</i>	0	165	0	283	0	0	0	0	0	2,500	0
<i>Trichocerca</i> sp.	0	0	0	0	0	0	0	0	0	3,125	0
Trichotria	sp.										
Total	518,300	5,123	46,338	12,598	78,950	1,391	738,540	34,731			

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1968

	LOCK A POOL		ABERDEEN LAKE		BUTTA RIVER BENDWAY		BELOW ABERDEEN L & D		BUTTA RIVER BENDWAY	
	APRIL 14	JUNE 28	APRIL 12	JUNE 26	APRIL 12	JUNE 28	APRIL 12	JUNE 28	APRIL 13	JUNE 29
Cladocera										
<i>Alona quadrangularis</i>	0	0	0	0	0	0	0	0	0	0
<i>Alona rectangula</i>	0	54	0	0	0	0	0	0	0	0
<i>Bosmina longirostris</i>	180,000	1,732	57,410	919	53,520	0	0	6,012	380	380
<i>Ceriodaphnia lacustris</i>	5,630	0	900	0	0	176	0	0	0	0
<i>Chydorus sp.</i>	0	0	0	0	0	0	0	59	0	0
<i>Daphnia ambigua</i>	7,500	0	900	0	1,800	0	0	236	0	0
<i>Daphnia parvula</i>	0	0	0	0	0	0	0	0	0	0
<i>Daphnia retrocurva</i>	20,630	108	3,170	0	2,870	528	118	0	0	0
<i>Diaphanosoma leuchtenbergianum</i>	18,750	162	450	10,771	1,800	2,993	0	0	8,750	0
<i>Holopedium gibberum</i>	1,880	0	450	0	720	0	0	0	0	0
<i>Ilyocryptus spinifer</i>	0	0	0	0	0	0	0	0	0	0
<i>Leptodora kindtii</i>	0	0	0	0	0	0	0	0	0	0
<i>Mesocyclops edax</i>	1,880	0	0	0	0	0	0	0	0	0
<i>Molna minuta</i>	0	0	0	0	0	0	0	0	0	0
<i>Sida crystallina</i>	0	0	0	0	263	0	0	0	0	0
<i>Simocephalus serrulatus</i>	0	0	0	0	0	0	0	0	0	0
Total	236,270	2,056	63,280	11,953	60,710	3,697	6,425	9,130		
Copepoda										
<i>Calanoid imm.</i>										
<i>Cyclopoid imm.</i>										
<i>Cyclops bicuspidatus thomasi</i>	15,000	1,677	4,070	5,254	4,310	1,232	589	2,850		
<i>Cyclops vernalis</i>	0	0	0	0	0	0	0	0	118	0
<i>Diaptomus pallidus</i>	0	0	0	0	657	0	0	0	0	0
<i>Diaptomus reichardi</i>	0	0	0	0	0	0	0	0	0	0
<i>Epischura aluvialis</i>	0	108	0	0	0	0	0	0	0	0
<i>Epischura sp.</i>	0	0	0	0	0	0	0	0	0	0
<i>Ergasilus imm.</i>	0	0	0	0	0	0	0	0	0	0
<i>Mesocyclops edax</i>	0	0	0	0	1,708	0	0	0	0	0
<i>Nauplius</i>	28,130	12,825	11,300	37,828	10,420	21,303	884	9,510		
<i>Tropocyclops prasinus</i>	0	54	450	131	0	0	0	0	0	0
Total	43,130	14,772	16,720	46,366	17,610	22,887	1,827	13,120		
Rotifera										
<i>Asplanchna herricki</i>	5,630	758	4,520	1,445	3,590	528	413	3,230		
<i>Brachionus angularis</i>	0	216	0	657	0	9,155	118	1,140		
<i>Brachionus beninii</i>	0	0	0	0	0	0	0	0	0	0
<i>Brachionus bidentata</i>	0	0	0	131	0	0	0	0	0	0
<i>Brachionus budapestensis</i>	0	0	0	3,415	0	1,937	59	3,040		
<i>Brachionus calyciflorus</i>	0	271	2,710	2,364	6,110	0	1,356	8,560		
<i>Brachionus caudatus</i>	0	0	3,620	2,364	360	880	531	0		
<i>Brachionus havanensis</i>	0	0	0	0	0	0	0	0	0	0
<i>Brachionus quadridentatus</i>	0	0	0	0	0	0	0	0	0	0

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1968 -- Continued

	LOCK A POOL		ABERDEEN LAKE		BUTTA RIVER BENDWAY	
	APRIL 14	JUNE 26	APRIL 12	JUNE 28	APRIL 12	JUNE 26
<i>Brachionus urceolaris</i>	0	0	0	0	0	0
<i>Collotheca</i> sp.	0	0	0	0	0	0
<i>Conochilooides</i> sp.	0	2,435	0	14,054	0	0
<i>Conochilus unicornis</i>	178,110	1,894	205,240	2,627	158,410	4,930
<i>Epiphantes macrourus</i>	3,750	0	0	0	0	0
<i>Filinia longisetata</i>	0	379	450	131	0	0
<i>Hexarthra intermedia</i>	0	0	0	0	0	0
<i>Kellicottia bostoniensis</i>	0	0	450	0	360	0
<i>Kellicottia longispina</i>	0	0	0	0	0	0
<i>Keratella cochlearis</i>	0	0	0	0	0	0
<i>Keratella crassa</i>	0	162	0	525	0	0
<i>Keratella ecariniae</i>	26,250	703	6,780	2,233	13,550	704
<i>Keratella quadrata</i>	0	0	0	0	720	0
<i>Keratella valga</i>	0	0	1,360	0	360	0
<i>Leucane</i> sp.	0	0	0	0	0	0
<i>Platyias patulus</i>	0	379	0	0	360	0
<i>Platyias quadicornis</i>	0	0	0	0	0	0
<i>Ploesona hudsoni</i>	7,500	0	900	0	0	0
<i>Ploesona truncata</i>	3,750	812	0	0	720	0
<i>Polyarthra</i> sp.	65,630	0	4,070	4,335	6,470	5,810
<i>Rotifera</i>	1,980	0	0	0	0	0
<i>Synchaeta</i> sp.	0	0	4,520	0	0	0
<i>Synchaeta stylata</i>	15,000	1,894	0	1,839	6,470	8,627
<i>Trichocerca</i> sp.	0	1,028	0	1,708	0	4,401
<i>Trichotria</i> sp.	0	0	0	0	352	177
Total	307,520	10,931	234,620	37,828	197,580	36,556
						52,165
						162,240

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988

	COLUMBUS LAKE			BELOW COLUMBUS L & D			COLUMBUS BENDWAY			PRATT CAMP BENDWAY		
	APRIL 13	JUNE 29	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11
Ciliacea												
<i>Alona quadrangularis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alona rectangularis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Bosmina longirostris</i>	71,180	0	60,560	860	21,834	369	75,790	0	0	0	205	0
<i>Ceriodaphnia lacustris</i>	1,740	0	0	86	0	615	0	0	0	0	0	0
<i>Chydorus sp.</i>	1,740	0	1,210	0	1,092	0	0	0	0	0	0	0
<i>Daphnia ambigua</i>	1,740	0	0	0	0	0	0	0	0	0	0	0
<i>Daphnia parvula</i>	0	0	0	0	0	0	0	0	1,050	0	0	0
<i>Daphnia retrocurva</i>	1,740	296	0	0	0	0	369	0	0	0	307	0
<i>Diaphanoecoma Leuchtenbergianum</i>	0	2,961	0	10,316	0	0	4,794	0	0	0	1,025	0
<i>Holopedium gibberum</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ilyocryptus spinifer</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Leptodora kindtii</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mesocyclops edax</i>	0	0	0	0	0	0	0	0	0	0	102	0
<i>Moina micrura</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Moina minuta</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Sida crystallina</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Simocephalus serrulatus</i>	0	0	0	0	0	0	0	0	0	0	0	0
Total	78,140	3,257	61,770	11,262	22,926	6,147	76,840	1,639				
Copepoda												
<i>Calanoid imm.</i>												
<i>Cyclopoid imm.</i>												
<i>Cyclops bicuspidatus thomasi</i>	1,740	592	7,270	1,547	2,729	1,967	4,210	0	0	0	307	0
<i>Cyclops vernalis</i>	0	0	0	0	0	0	0	0	0	0	2,869	0
<i>Diaptomus pallidus</i>	0	0	1,210	0	546	0	0	0	1,050	0	102	0
<i>Diaptomus reigardi</i>	870	148	0	0	0	0	0	0	0	0	0	0
<i>Epischura fluvialis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Epischura sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ergasilus imm.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mesocyclops edax</i>	0	0	0	0	0	0	0	0	0	0	1,230	0
<i>Naupili</i>	9,550	6,959	8,480	18,741	5,459	5,040	6,15	0	16,840	0	13,012	0
<i>Tropocyclops praesinus</i>	0	0	1,210	0	0	0	0	0	0	0	0	0
Total	14,770	7,995	18,170	20,632	8,734	7,745	22,100	17,520				
Rotifera												
<i>Asplanchna herricki</i>	4,340	1,481	12,110	344	6,550	369	16,840	1,025				
<i>Brachionus angularis</i>	0	15,694	0	13,067	546	29,624	1,050	31,557				
<i>Brachionus beninii</i>	0	0	0	0	0	0	0	0				
<i>Brachionus bidentata</i>	0	0	2,420	0	0	0	246	0			512	0
<i>Brachionus budapestensis</i>	0	11,548	1,210	430	0	0	4,056	0			2,049	
<i>Brachionus calyciflorus</i>	7,810	1,777	14,540	602	9,825	3,319	15,790	5,123				
<i>Brachionus caudatus</i>	0	8,143	0	12,036	0	11,677	0	1,742				
<i>Brachionus havanaensis</i>	0	0	0	0	0	0	246	0				
<i>Brachionus quadridentatus</i>	0	0	1,210	0	0	0	1,092	123				

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1968 -- Continued

	COLUMBUS LAKE		COLUMBUS L & D		COLUMBUS BENDWAY		COLUMBUS BENDWAY		PRATT CAMP		PRATT BENDWAY	
	APRIL 13	JUNE 29	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11	APRIL 18	JULY 11
<i>Brachionus urceolaris</i>	0	0	0	0	0	0	246	0	0	0	0	0
<i>Collothea</i> sp.	0	0	1,210	86	546	123	0	0	0	0	307	307
<i>Conochilooides</i> sp.	1,740	4,146	2,420	3,611	1,092	738	1,050	820	1,050	1,050	820	820
<i>Conochilius unicornis</i>	543,400	592	70,250	258	48,035	123	132,630	0	0	0	0	0
<i>Epiphantes macrourus</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Filinia longistyla</i>	0	0	1,210	0	0	0	0	0	0	0	3,160	0
<i>Hexarthra intermedia</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Kellicotti hostiensis</i>	870	0	8,480	0	4,367	0	0	0	0	0	7,370	0
<i>Kellicottia longispina</i>	870	0	0	0	546	0	0	0	0	0	3,160	0
<i>Keratella cochlearis</i>	870	0	1,210	344	0	0	0	0	0	0	6,320	0
<i>Keratella crassa</i>	5,210	296	1,210	0	0	0	369	0	0	0	7,370	0
<i>Keratella eariniae</i>	33,850	1,184	49,660	516	27,293	983	0	0	0	0	0	0
<i>Keratella quadrata</i>	1,740	0	0	0	0	0	0	0	0	0	0	0
<i>Keratella valga</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Leucane</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0
<i>Platyias patulus</i>	0	0	0	0	0	0	0	0	0	0	0	102
<i>Platyias quadricornis</i>	0	0	0	0	0	0	123	0	0	0	0	102
<i>Ploesoma hudsoni</i>	1,740	6,218	4,850	860	1,638	0	1,050	0	0	0	0	0
<i>Ploesoma truncata</i>	0	0	0	0	546	860	0	0	0	0	0	717
<i>Polyarthra</i> sp.	27,760	1,332	60,560	1,977	44,214	3,688	45,260	717	717	717	0	0
<i>Rotifera</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Synchaeta</i> sp.	0	0	150,190	0	62,773	0	18,950	0	0	0	0	0
<i>Synchaeta stylata</i>	32,120	7,699	0	774	0	3,565	0	0	0	0	2,357	0
<i>Trichocerca</i> sp.	0	4,294	0	258	0	123	0	0	0	0	4,918	0
<i>Trichoptria</i> sp.	1,740	0	4,850	0	1,092	0	6,320	0	0	0	0	0
Total	664,060	64,404	367,590	35,163	211,247	60,601	406,320	52,867				

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1966

	ABOVE ALICEVILLE L & D		BELOW ALICEVILLE L & D		BIG CREEK BENDWAY		COOKS BENDWAY	
	APRIL 19	JULY 12	APRIL 19	JULY 12	APRIL 19	JULY 12	APRIL 19	JULY 12
Cladocera								
<i>Alona quadrangularis</i>	0	0	0	0	0	331	0	0
<i>Alona rectangula</i>	0	0	0	0	0	0	0	0
<i>Bosmina longirostris</i>	36,238	184	49,650	351	7,937	732	37,960	329
<i>Ceriodaphnia lacustris</i>	324	184	440	0	331	0	0	165
<i>Chydorus sp.</i>	324	0	890	0	331	0	520	0
<i>Daphnis ambigua</i>	324	0	0	0	0	0	0	0
<i>Daphnia parvula</i>	0	0	0	0	0	0	0	0
<i>Daphnia retrocurva</i>	0	0	0	0	0	0	0	0
<i>Diaphanoecoma leuchtenbergianum</i>	0	6,791	0	1,580	0	0	0	0
<i>Holopedium gibberum</i>	0	0	0	4,565	0	0	1,463	0
<i>Hydrocypris spinifer</i>	0	275	0	0	0	0	0	0
<i>Leptodora kindtii</i>	0	0	0	0	0	0	0	0
<i>Molna micrura</i>	0	0	0	0	0	0	0	0
<i>Molna minuta</i>	0	0	0	0	0	0	0	0
<i>Sida crystallina</i>	0	92	0	0	0	0	0	0
<i>Simocephalus serrulatus</i>	0	0	0	0	0	0	0	0
Total	37,210	7,526	50,980	6,496	8,930	2,195	36,480	7,908
Copepoda								
<i>Calanoid imm.</i>	647	275	0	2,107	0	183	0	165
<i>Cyclopoid imm.</i>	2,265	2,845	6,210	6,778	1,323	915	0	824
<i>Cyclops bicuspidatus thomasi</i>	0	0	0	0	0	0	0	165
<i>Cyclops vernalis</i>	0	0	0	176	0	0	0	0
<i>Diaptomus pallidus</i>	0	0	0	0	0	0	0	165
<i>Diaptomus reighardi</i>	0	92	0	0	0	0	0	165
<i>Epiischura fluvatilis</i>	0	0	0	0	0	0	0	165
<i>Epiischura sp.</i>	0	0	0	0	0	0	0	0
<i>Erigasilius imm.</i>	0	92	0	0	0	0	0	0
<i>Metacyclops edax</i>	1,294	15,602	3,550	16,054	3,307	5,486	1,560	6,096
<i>Nauplius</i>	0	184	0	0	0	0	0	494
<i>Tropocyclops prasinus</i>	Total	4,206	19,090	9,760	20,015	4,630	6,586	1,560
Total	4,206	19,090	9,760	20,015	4,630	6,586	1,560	8,074
Rotifera								
<i>Aeplanchna herricki</i>	16,501	459	24,380	2,107	5,291	0	29,120	3,130
<i>Brachionus angularis</i>	2,588	33,131	2,660	8,954	15,915	5,720	65,074	0
<i>Brachionus bennini</i>	0	0	0	0	366	0	1,560	0
<i>Brachionus bidentata</i>	0	0	890	0	366	1,560	11,532	0
<i>Brachionus budapestiensis</i>	0	5,690	0	1,104	0	549	1,646	7,414
<i>Brachionus calyciflorus</i>	9,707	17,621	25,710	9,656	1,984	1,646	17,680	0
<i>Brachionus caudatus</i>	0	6,352	0	5,442	0	2,561	0	3,954
<i>Brachionus havanaensis</i>	0	0	440	0	183	0	0	0
<i>Brachionus quadridentatus</i>	0	0	890	0	0	0	0	0

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1968 -- Continued

	ABOVE ALICEVILLE		BELOW ALICEVILLE		BIG CREEK		COOKS BENDWAY	
	APRIL 19	JULY 12	L & D	L & D	APRIL 19	JULY 12	APRIL 19	JULY 12
<i>Brachionus urceolaris</i>	0	0	0	0	0	0	0	0
<i>Collotheca</i> sp.	324	92	890	0	0	331	0	2,600
<i>Conochilooides</i> sp.	0	11,380	0	4,038	0	183	2,080	494
<i>Conochilus unicornis</i>	57,269	7,801	111,260	4,213	331	1,280	216,830	7,414
<i>Epiphantes macrourus</i>	0	0	0	0	0	0	0	7,084
<i>Filiinia longiseta</i>	971	92	440	0	0	0	520	0
<i>Heterorhabra intermedia</i>	0	0	0	0	0	0	0	0
<i>Kellicottia bostoniensis</i>	2,912	0	2,660	0	661	0	4,160	0
<i>Kellicottia longispina</i>	0	0	0	0	0	0	0	0
<i>Keratella cochlearis</i>	2,265	0	2,220	0	0	0	13,520	165
<i>Keratella crassa</i>	5,824	0	3,550	0	0	0	3,120	1,153
<i>Keratella eariniae</i>	55,975	0	99,730	0	4,299	0	0	121,670
<i>Keratella quadrata</i>	1,618	0	890	0	0	0	0	329
<i>Keratella vaiga</i>	0	0	0	0	0	0	0	0
<i>Leucane</i> sp.	0	0	0	0	0	183	0	0
<i>Platyias patulus</i>	0	918	440	0	0	0	0	494
<i>Platyias quadicornis</i>	0	0	0	0	0	0	0	0
<i>Ploesona hudsoni</i>	324	0	1,330	0	0	0	520	0
<i>Ploesona truncata</i>	0	0	0	351	0	0	2,080	824
<i>Polyarthra</i> sp.	11,648	367	12,860	176	331	549	5,720	0
<i>Rotifera</i>	0	0	0	0	0	0	0	0
<i>Synchaeta</i> sp.	971	0	7,540	0	992	0	6,240	0
<i>Synchaeta stylata</i>	0	6,608	0	1,756	0	2,378	0	4,283
<i>Trichocerca</i> sp.	0	918	0	351	0	1,463	0	165
<i>Trichoptria</i> sp.	0	0	0	0	0	0	0	0
Total	168,697	93,429	298,780	38,448	14,220	27,622	433,140	113,509

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1968

	ABOVE GAINESVILLE		GAINES- VILLE AL		ABOVE DEMOPOLE	
	L & D	JULY 13	APRIL 20	JULY 13	APRIL 20	L & D
	APRIL 19					JULY 13
Cladocera						
<i>Alona quadrangularis</i>	0	0	0	0	0	0
<i>Alona rectangula</i>	0	0	0	0	0	0
<i>Bosmina longirostris</i>	39,750	326	46,650	2,803	54,800	7,240
<i>Ceriodaphnia lacustris</i>	0	326	0	140	0	543
<i>Chydorus sp.</i>	0	0	800	0	780	0
<i>Daphnia ambigua</i>	0	0	0	0	0	0
<i>Daphnia parvula</i>	0	0	0	0	0	0
<i>Daphnia retrocurva</i>	0	0	0	0	0	0
<i>Diaphanosoma leuchtenbergianum</i>	0	9,943	0	0	1,682	0
<i>Holopedium gibberum</i>	0	0	0	0	0	0
<i>Ilyocryptus spinifer</i>	0	0	0	0	0	0
<i>Leptodora kindtii</i>	0	0	0	0	0	0
<i>Moina micrura</i>	0	163	0	0	0	0
<i>Moina minuta</i>	0	0	0	140	0	0
<i>Sida crystallina</i>	0	0	0	0	0	0
<i>Simocephalus serrulatus</i>	0	0	0	0	0	0
Total	39,750	10,758	47,450	4,765	55,580	17,104
Copepoda						
<i>Calanoid imm.</i>	0	163	0	420	0	452
<i>Cyclopoid imm.</i>	960	2,119	0	2,522	1,570	2,805
<i>Cyclops bicuspidatus thomasi</i>	0	0	0	0	0	0
<i>Cyclops vernalis</i>	0	0	0	0	0	452
<i>Diaptomus pallidus</i>	0	0	0	0	0	0
<i>Diaptomus reichardi</i>	0	163	0	0	0	452
<i>Epischura fluvialis</i>	0	0	0	0	0	0
<i>Epischura sp.</i>	0	0	0	0	0	0
<i>Ergasilus imm.</i>	0	0	0	0	0	90
<i>Nesocylops edax</i>	960	326	0	280	0	2,443
<i>Nauplius</i>	5,210	12,225	2,410	11,771	7,050	10,136
<i>Tropocyclops prasinus</i>	0	0	0	0	0	0
Total	7,190	14,996	2,410	14,993	8,620	16,630
Rotifera						
<i>Asplanchna herricki</i>	17,240	0	31,370	420	50,890	181
<i>Brachionus angularis</i>	10,540	11,899	14,480	4,484	4,700	13,394
<i>Brachionus boennini</i>	0	0	0	140	0	0
<i>Brachionus bidentata</i>	9,580	0	0	0	0	0
<i>Brachionus budapestensis</i>	0	2,282	0	1,401	0	3,982
<i>Brachionus calyciflorus</i>	15,810	7,009	12,870	3,083	21,140	4,796
<i>Brachionus caudatus</i>	0	6,846	0	2,102	780	3,891
<i>Brachionus havanaensis</i>	0	0	0	561	0	0
<i>Brachionus quadridentatus</i>	960	163	1,610	0	0	0

ZOOPLANKTON DENSITIES (NUMBER/CUBIC METER) IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 -- Continued

	ABOVE GAINESVILLE			GAINES- VILLE AL			ABOVE DEMOPOLIS		
	APRIL 19		JULY 13	APRIL 20		JULY 13	APRIL 20		JULY 13
	L	E	D	L	E	D	L	E	D
<i>Brachionus urceolaris</i>	0	0	0	0	0	0	280	0	0
<i>Collotheca</i> sp.	1,920	0	0	3,220	0	0	38,360	0	90
<i>Conochiloides</i> sp.	1,440	7,987	0	0	2,102	0	0	9,593	0
<i>Conochilus unicornis</i>	264,850	1,630	142,380	0	0	0	95,510	4,253	0
<i>Epiphantes macrourus</i>	0	0	0	0	0	0	0	0	0
<i>Filinia longisetosa</i>	0	0	0	0	0	0	0	0	0
<i>Hexarthra intermedia</i>	0	0	0	0	0	0	0	0	0
<i>Kallicottia bostoniensis</i>	5,750	0	10,460	0	0	0	0	0	0
<i>Kallicottia longispina</i>	0	0	0	0	0	0	0	0	0
<i>Keratella cochlearis</i>	12,450	0	4,020	0	0	0	7,830	0	0
<i>Keratella crassa</i>	18,680	163	13,670	0	0	0	34,450	0	0
<i>Keratella carolinae</i>	181,510	163	213,160	0	0	0	418,840	0	0
<i>Keratella quadrata</i>	480	0	2,410	0	0	0	0	0	0
<i>Keratella valga</i>	0	0	0	0	0	0	0	0	0
<i>Lacane</i> sp.	0	0	0	0	0	0	0	0	0
<i>Platyias patulus</i>	960	652	0	0	280	0	0	905	0
<i>Platyias quadricornis</i>	0	0	0	0	140	0	0	0	0
<i>Pleosoma hudsoni</i>	960	0	0	0	0	0	0	0	0
<i>Pleosoma truncata</i>	2,870	326	1,610	0	0	0	0	1,538	0
<i>Polyarthra</i> sp.	60,820	815	210,750	1,962	136,220	0	0	362	0
<i>Rotifera</i>	0	0	0	0	0	0	0	0	0
<i>Synchaeta</i> sp.	8,140	0	17,700	0	0	0	48,540	0	0
<i>Synchaeta stylata</i>	0	3,097	0	0	701	0	0	2,624	0
<i>Trichocerca</i> sp.	0	489	0	0	0	0	0	0	0
<i>Trichotria</i> sp.	9,580	0	8,040	0	0	0	6,260	0	0
Total	624,540	43,521	687,750	17,656	863,520	45,609			

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

PERIPHYTON DENSITIES

PERiphyton Densities (Number/Square Centimeter) IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988

	CROSS ROADS MS	BAY SPRINGS LAKE	BL BAY SPRINGS L & D	LOCK D POOL	LOCK A ABERDEEN POOL	BELOW LAKE	BUTTA RIVER	COLUMBUS LAKE	COOKS BENDWAY	GAINESVILLE AL
	JUL 27	JUL 27	JUL 27	JUL 27	JUL 26	JUL 26	JUL 26	JUL 26	JUL 26	AUG 9
Chlorophyta										
<i>Closteridium</i>	75	0	0	0	0	0	0	0	0	0
<i>Cosmarium</i>	112	0	0	0	0	0	75	56	0	93
<i>Micractinium</i>	0	0	0	0	0	0	2,205	0	0	0
<i>Mougeotia</i>	822	542	710	0	0	3,456	0	318	934	0
<i>Oedogonium</i>	0	0	0	0	0	0	0	0	0	747
<i>Pediastrum</i>	0	0	0	0	0	0	0	0	0	504
<i>Scenedesmus</i>	673	75	0	149	0	149	0	0	0	374
<i>Stigeoclonium</i>	7,772	2,410	579	0	0	2,055	1,177	3,830	1,233	14,778
Total	9,454	3,027	1,289	149	0	5,660	3,457	4,204	2,242	16,702
Total	11,396	16,870	18,739	1,177	0	0	0	0	0	0
Chrysophyta										
<i>Achnanthes</i>	448	0	0	0	206	411	336	355	0	0
<i>Cocconeis</i>	841	280	0	187	0	262	299	299	430	448
<i>Cymbella</i>	0	0	0	0	0	0	75	0	75	318
<i>Eunotia</i>	0	224	0	0	0	0	0	0	0	112
<i>Fragilaria</i>	934	486	504	224	187	0	0	318	579	0
<i>Gomphonema</i>	0	0	0	0	0	0	37	0	0	187
<i>Gyrosigma</i>	0	0	0	0	0	0	0	0	0	37
<i>Mallomonas</i>	0	0	0	0	0	0	318	0	0	0
<i>Melosira</i>	0	0	0	262	187	0	112	710	747	1,383
<i>Navicula</i>	1,270	131	0	0	0	336	187	206	542	467
<i>Nitzschia</i>	224	37	0	0	0	523	262	635	355	0
<i>Stephanodiscus</i>	0	0	0	0	0	0	0	0	75	37
<i>Synechra</i>	224	149	0	0	430	0	0	0	131	112
Total	19,335	12,703	17,374	19,412	1,981	1,645	1,363	2,579	3,139	2,896
Cyanophyta										
<i>Oscillatoria</i>	0	0	1,046	0	0	0	0	0	0	0
Total	0	0	1,046	0	0	0	0	0	0	0

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(TVA-59 FOLLOWS)

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

PERIPHYTON AUTOTROPHIC INDICES

CHLOROPHYLL/BIOMASS ANALYSES IN THE AREA OF THE TENNESSEE-TOMBIGBEE WATERWAY, 1988

STATION DESCRIPTION	DATE	REP. NO.	PAM2	PI	CBM2	CCM2	CAM2	AFOW	AI	CCAM2	CAI
03592824 TTW at Cross Roads, MS	27JUL88	1	1.80	1.45	0.57	1.16	4.38	1407.53	321.26	3.22	437.31
		2	7.07	1.21	0.38	1.80	7.45	2106.16	282.62	3.07	685.53
		3	9.26	1.26	0.60	2.24	11.28	2407.53	213.53	5.49	438.83
		4	7.85	1.13	1.01	1.12	6.59	2684.25	4.07	1.83	1467.79
		5	0.17	1.68	0.44	1.12	5.67	2066.44	364.24	5.41	381.74
		6	11.31	1.12	0.30	1.54	9.37	2558.90	273.15	2.41	1060.04
		7	6.69	1.17	0.30	0.93	6.25	2578.77	412.64	2.12	1215.61
		8	5.36	1.17	0.00	0.30	5.12	2091.78	408.79	1.76	1191.48
343140088192235 TTW Bay Springs Lake Navigation Mile 412.3	27JUL88	1	4.48	1.14	0.00	0.16	3.94	1377.40	349.80	1.10	1255.31
		2	1.05	1.58	0.00	0.36	5.88	2032.88	345.67	5.05	402.76
		3	0.36	1.65	0.00	0.35	5.05	1817.12	359.56	4.61	394.30
		4	2.84	1.33	0.00	0.15	4.37	1741.78	398.14	2.49	700.32
		5	0.55	1.63	0.00	0.01	5.35	2186.30	408.51	4.83	452.84
		6	3.31	1.24	0.00	0.16	3.91	1796.58	460.05	1.76	1023.33
		7	3.26	1.29	0.00	0.13	4.38	1922.60	439.22	2.27	847.83
		8	5.93	1.13	0.00	0.00	5.09	2339.04	459.15	1.39	1682.93
02430005 TTW below Bay Springs Ltd, MS	27JUL88	1	5.80	1.23	0.46	0.00	6.47	1991.78	307.99	2.85	698.17
		2	6.82	1.11	0.00	0.12	5.59	1723.97	308.45	1.32	1309.30
		3	11.98	1.10	0.00	0.57	9.49	2034.25	214.27	2.05	993.18
		4	1.59	1.56	0.00	0.31	7.55	2370.55	313.92	6.29	376.82
		5	10.80	1.15	0.00	0.92	9.78	2880.14	294.46	3.07	937.44
		6	8.38	1.17	0.00	0.45	8.03	2001.37	249.19	2.78	719.99
		7	0.86	1.60	0.00	0.18	6.28	1808.90	5.49	329.71	
		8	8.54	1.15	0.00	0.27	7.75	2209.59	285.16	2.41	915.33
342201088242935 TTW Lock "D" Pool Sedimentation Range 1AD	27JUL88	1	4.38	1.19	0.00	0.00	4.38	1528.08	348.93	1.61	949.52
		2	3.72	1.30	0.27	0.00	5.14	1704.79	331.59	2.78	613.30
		3	5.00	1.17	0.00	0.00	4.75	1528.77	321.80	1.61	949.95
		4	3.86	1.19	0.00	0.00	4.95	1595.21	404.16	1.46	1090.36
		5	2.47	1.28	0.00	0.00	3.33	7728.08	2321.95	1.68	4593.31
		6	1.87	1.37	0.00	0.00	3.42	1525.34	445.76	2.12	719.04
		7	2.35	1.39	0.11	0.00	4.47	1904.11	426.37	2.93	650.75
		8	3.20	1.16	0.00	0.00	3.00	1107.53	368.60	0.95	1164.65
340103088285435 TTW Lock "A" Pool Sedimentation Range 1AA	26JUL88	1	0.00	2.63	0.00	0.00	0.67	214.38	318.49	0.67	318.49
		2	1.03	1.36	0.59	0.00	1.72	271.92	157.85	1.10	247.82
		3	0.00	2.17	0.01	0.00	0.20	104.11	514.17	0.20	514.17
		4	0.51	1.32	0.21	0.23	0.75	139.04	186.10	0.44	316.79
		5	0.05	1.60	0.17	0.27	0.36	600.00	1673.54	0.33	1822.72
		6	0.08	1.62	0.28	0.21	0.71	119.86	168.71	0.66	182.06
		7	0.66	1.34	0.22	0.17	1.03	342.47	332.81	0.62	550.78
		8	0.00	2.00	0.00	0.04	0.89	269.18	303.45	0.89	303.45

CHLOROPHYLL/BIOMASS ANALYSES IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1986

STATION DESCRIPTION	DATE	REP. NO.	PAM2	PI	CBM2	CCM2	CAM2	AFTW	AI	CCAM2	CAI
33500888311335 TW Aberdeen Lake Sedimentation Range 1A	26JUL86	1	1.40	1.60	1.42	1.25	9.53	3642.47	382.03	8.49	429.26
		2	13.66	1.20	4.84	2.50	13.63	1515.75	111.19	5.49	276.28
		3	3.46	1.55	2.63	1.03	15.26	2726.71	178.71	12.87	211.79
		4	0.00	2.02	3.84	3.96	19.35	3310.27	171.07	19.35	171.07
		5	0.97	1.64	2.07	1.15	10.89	2502.05	29.71	10.39	247.86
		6	6.35	1.17	0.49	0.43	5.96	1154.79	193.79	2.05	563.80
		7	7.30	1.39	1.18	1.22	13.99	1873.29	133.88	9.49	201.64
		8	14.09	1.11	1.09	1.01	11.31	1763.70	155.89	2.71	651.63
02437101 Tombigbee River below Aberdeen MS	26JUL86	1	4.17	1.32	0.00	0.00	6.27	2036.30	324.71	3.51	579.94
		2	12.53	1.13	1.63	0.51	10.40	2085.62	200.49	2.78	750.30
		3	5.49	1.20	0.16	0.60	5.61	1596.58	284.71	2.19	727.53
		4	7.94	1.08	0.00	0.55	5.93	1780.14	300.41	1.02	1738.23
		5	5.33	1.19	0.51	0.56	5.33	2078.77	389.93	2.05	1014.91
		6	8.37	1.16	1.21	0.71	7.59	1826.71	240.63	2.19	734.47
		7	8.57	1.07	0.58	0.65	6.17	2918.49	473.14	0.95	3069.00
		8	12.13	1.07	1.47	0.91	8.72	2641.78	302.89	1.39	1900.75
333927088304935 TW Columbus Lake Butahatchee River Bendway 26A	26JUL86	1	1.96	1.41	0.18	0.42	4.14	1341.78	324.19	2.85	470.33
		2	9.73	1.17	1.07	1.01	9.02	2191.78	242.89	3.07	713.39
		3	5.44	1.21	1.35	0.78	5.64	3370.55	597.79	2.34	1439.90
		4	12.88	1.12	2.09	1.03	10.42	3167.81	303.93	2.63	1202.92
		5	9.72	1.11	0.73	0.77	7.84	2442.47	311.41	1.90	1284.21
		6	11.36	1.10	0.54	1.03	8.85	3925.34	443.29	1.90	2063.89
		7	4.12	1.13	0.05	0.03	3.50	1546.58	442.23	0.95	1626.33
		8	1.76	1.30	0.11	0.00	2.43	697.26	286.52	1.32	529.55
333119088291435 TW Columbus Lake Sedimentation Range 1A	26JUL86	1	3.64	1.17	0.00	0.03	3.45	15685.62	4552.96	1.17	13401.8
		2	9.94	1.17	0.00	0.00	0.88	34598.63	39150.86	0.29	118.244
		3	4.59	1.21	0.26	0.19	4.87	2083.36	427.83	2.01	1035.75
		4	1.93	1.62	0.00	0.00	15.89	3814.38	239.99	14.04	271.58
		5	5.19	1.18	0.27	0.03	5.04	6881.51	1364.68	1.83	3762.92
		6	1.59	1.27	0.00	0.00	2.00	1302.74	652.97	0.99	1319.18
		7	4.48	1.16	0.13	0.09	4.09	2553.42	624.74	1.32	1939.24
		8	7.97	1.15	0.00	0.81	7.20	8845.21	1228.66	2.25	3932.28
02447010 Tombigbee River (Cooks Bend) near Warsaw, AL	10AUG86	1	8.00	1.12	0.11	0.56	6.61	4603.42	696.23	1.68	2736.12
		2	3.61	1.20	0.00	0.18	3.72	1974.66	530.88	1.46	1349.72
		3	8.83	1.07	0.15	0.42	6.36	4741.10	745.95	0.95	4985.59
		4	8.35	1.12	1.00	1.07	6.76	3794.52	561.65	1.68	2255.33
02449000 Tombigbee River at Gainesville, AL	10AUG86	1	8.27	1.16	0.00	1.26	7.61	2987.67	392.40	2.49	1201.26
		2	8.90	1.06	0.29	1.23	6.31	2842.47	450.53	0.88	3238.14
		3	7.32	1.09	0.24	0.80	5.51	2932.19	532.60	1.02	2863.16
		4	8.53	1.11	0.33	1.50	6.83	3245.89	474.95	1.61	2016.94

APPENDIX TVA

TENNESSEE VALLEY AUTHORITY DATA

BENTHIC MACROINVERTEBRATE DENSITIES

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1986

	CROSS ROADS MS				BAY SPRINGS LAKE				BL BAY SPRINGS L & D					
	APRIL 11		JUNE 27		APRIL 11		JUNE 27		APRIL 11		JUNE 27			
	10	50	90	10	50	90	10	50	10	50	90	10	50	90
Annelida														
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pharyngobdellida														
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhynchobdellida														
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oligochaeta	6	18	30	36	242	568	12	6	48	175	0	12	24	6
Pisoiopora														
Branchiura sowerbyi	30	6	54	0	0	0	0	0	0	0	0	0	0	0
Arthropoda														
Crustacea														
Aphipoda	6	0	6	0	0	0	0	0	0	0	0	0	0	0
Hyalellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isopoda														
Lirceus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea														
Insecta														
Coleoptera														
Berosus sp.	0	0	0	0	0	0	6	6	0	0	0	0	0	0
Dubiraphia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dytiscidae														
Elimidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Optioservus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenelmis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diptera														
Abilabessvia sp.	30	0	24	0	0	0	0	0	0	12	0	0	0	0
Berria sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopodionidae	18	0	0	0	0	0	0	0	0	6	0	0	0	0
Chaoborus sp.	18	12	24	0	30	18	175	6,049	2,949	84	205	206	0	30
Chironomidae	60	30	30	12	6	12	67	12	18	61	30	6	0	42
Chironomus sp.	55	60	326	0	0	0	0	6	199	187	0	6	6	55
Coelotanypus sp.	278	169	448	97	91	42	24	0	0	6	12	0	0	61
Cryptochironomus sp.	30	24	30	0	24	6	30	18	6	12	0	0	6	61
Dicrotendipes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	48
Einfeldia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epicoccidioides sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukiefferiella sp.	6	6	0	0	0	0	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMIGEE WATERWAY, 1988 -- Continued

	CROSS ROADS MS						BAY SPRINGS LAKE						BL BAY SPRINGS L & D					
	APRIL 11			JUNE 27			APRIL 11			JUNE 27			APRIL 11			JUNE 27		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Polypedilum sp.	12	0	24	12	0	18	0	0	0	0	0	0	0	0	0	0	0	0
Procloadius sp.	97	36	176	6	6	36	12	24	12	6	6	0	0	0	0	0	0	0
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanyptus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caenis sp.	12	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isonychia sp.	42	48	18	6	0	0	0	0	0	12	0	0	0	0	0	0	0	0
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyreneus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydroptilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988 -- Continued

	CROSS ROADS MS				BAY SPRINGS LAKE				BL BAY SPRINGS L & D			
	APRIL 11		JUNE 27		APRIL 11		JUNE 27		APRIL 11		JUNE 27	
	10	50	10	50	10	50	10	50	10	50	10	50
Bryozoa												
Phylactolaemata												
Plumatellina												
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida												
Corbicula manilensis	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	73	24	42	18	6	0	157	42	0	48	0	67
Eupera cubensis	0	0	0	0	0	0	0	0	0	0	0	6
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0
Propera sp.	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	42	6	36	6	12	0	0	0	0	12	0	6
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0	0
Basommatophora												
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda												
Campeloma sp.	0	0	0	0	0	0	0	0	0	0	0	0
Nematata	0	0	0	6	6	0	0	0	0	0	0	0
Platyhelminthes												
Turbellaria												
Tricladida												
Planariidae	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1986

	LOCK D POOL						LOCK A POOL						MACKEYS CREEK					
	APRIL 11			JUNE 27			APRIL 12			JUNE 28			APRIL 11			JUNE 27		
	10*	50	90	10	50	90	10	50	90	10	50	90	10*	50*	90*	10*	50*	90*
Annelida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hirudinea																		
Pharyngobdellida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae																		
Rhynchobdellida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae																		
Oligochaeta	103	315	36	411	85	1,184	206	242	327	1,209	115	103	0	0	0	172	127	127
Plesiopora																		
Branchiura soverbyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arthropoda																		
Crustacea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphipoda																		
Hyalella azteca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isopoda																		
Lirceus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insecta																		
Coleoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Berosus sp.																		
Dubiraphia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dytiscidae																		
Elmidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Optioservus sp.																		
Stenelmis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ablabesmyia sp.																		
Bezzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chaoborus sp.	187	42	24	79	103	61	42	0	12	36	0	42	0	0	0	0	0	0
Chironomidae	85	60	48	30	48	308	48	157	72	121	6	129	0	0	0	0	0	0
Chironomus sp.	103	6	157	0	223	0	30	0	109	67	36	12	0	0	0	36	163	163
Coelotanypus sp.	91	0	18	0	24	0	6	0	133	24	24	18	0	0	0	0	0	0
Cryptochironomus sp.	6	42	48	24	0	61	85	18	6	0	36	0	0	0	18	36	36	36
Dicranotidipes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia sp.																		
Epoicocadius sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukiefferiella sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1988 -- Continued

	LOCK D POOL						LOCK A POOL						MACKEY'S CREEK					
	APRIL 11			JUNE 27			APRIL 12			JUNE 28			APRIL 11			JUNE 27		
	10	50	90	10	50	90	10	50	90	10	50	90	10*	50*	90*	10*	50*	90*
Polypodium sp.	0	18	24	0	0	42	18	0	0	0	54	0	36	0	0	0	0	0
Procladius sp.	284	30	332	109	181	115	24	6	42	42	18	6	0	0	0	0	0	0
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	36	36
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypus sp.	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caenis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	43	43
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	18	18
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyreneilus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydroptilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988 -- Continued

	LOCK D POOL						LOCK A POOL						MACKEY'S CREEK					
	APRIL 11			JUNE 27			APRIL 12			JUNE 26			APRIL 11			JUNE 27		
	10	50	90	10	50	90	10	50	90	10	50	90	10*	50*	90*	10*	50*	90*
Bryozoa																		
Phyacioltosnata																		
Plumatellina																		
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca																		
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida																		
Corbicula manilensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	0	6	0	30	6	0	0	0	0	60	30	0	0	0	0	0	0	0
Eupera cubensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	12	6	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	0	0	12	6	0	0	0	0	0	0	0	0
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basommatophora																		
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	0	0	0
Mesogastropoda																		
Capeolina sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nemata	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0
Platyhelminthes																		
Turbellaria																		
Tricladida																		
Planariidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Number based on one sample.

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988

	TOWN CREEK				AMORY MS				ABERDEEN LAKE			
	APRIL 12		JUNE 28		APRIL 12		JUNE 28		APRIL 12		JUNE 28	
	10	50	90	10	50	90	10	50	90	10	50	90
Annelida												
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0
Pharyngobdellidae	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0
Rhynchobdellida	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0
Oligochaeta	0	0	0	0	57	445	12	0	6	212	0	0
Plesiopora	0	0	0	0	0	0	0	0	0	30	54	12
Branchiura sowerbyi	0	0	0	0	0	0	0	0	0	67	0	6
Arthropoda												
Crustacea	0	0	0	0	0	0	0	0	0	0	0	0
Amphipoda	0	0	0	0	0	0	0	0	0	0	0	0
Hyalellia azteca	0	0	0	0	0	0	0	0	0	0	0	0
Isopoda	6	22	0	0	0	0	0	0	0	0	0	0
Lirceus sp.												
Nysidacea	0	0	0	0	0	0	0	0	0	0	0	0
Insecta												
Coleoptera	0	0	0	14	14	0	0	0	0	0	0	0
Berosus sp.	0	0	0	14	14	158	0	0	0	0	0	0
Dubiraphia sp.	0	0	0	14	0	0	0	0	0	0	0	0
Dytiscidae	0	0	0	0	0	0	0	0	0	0	0	0
Elmidae	0	0	0	0	0	0	14	0	0	0	0	0
Optioservus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Stenelmis sp.	0	0	0	0	0	57	0	0	0	0	0	0
Diptera												
Abiabensisia sp.	6	0	0	0	0	0	0	0	0	0	0	0
Bezzia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	0	9	57	445	86	0	0	0	18	0	6	0
Chaoborus sp.	6	27	6	0	57	0	0	0	6	18	6	0
Chironomidae	18	73	215	947	1,995	1,794	429	236	326	109	157	0
Chironomus sp.	0	0	0	0	201	2,262	0	0	0	0	163	30
Coelotanypus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Cryptochironomus sp.	0	0	589	1,435	1,177	6	0	0	0	78	187	157
Dicrotendipes sp.	0	0	172	1,435	1,349	0	0	0	0	42	0	36
Einfeldia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Epococleidius sp.	0	0	0	0	0	0	0	0	0	0	0	0
Eukiefferiella sp.	0	0	0	0	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	144	201	229	0	0	0	0	0	0	12
Parachironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	14	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1968 -- Continued

	TOWN CREEK						AMORY MS						ABERDEEN LAKE					
	APRIL 12			JUNE 28			APRIL 12			JUNE 28			APRIL 12			JUNE 28		
	10	50*	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Polypodium sp.	0	0	0	215	14	86	0	0	0	0	0	0	0	0	0	0	0	0
Proctadius sp.	14	0	0	0	0	0	0	0	0	0	0	0	236	66	103	30	0	16
Pseudochironomus	0	0	0	215	14	86	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus sp.	0	0	0	258	24	85	0	0	0	0	0	0	0	0	0	0	0	0
Tanypterus sp.	0	0	0	30	0	0	0	0	0	0	0	0	54	0	61	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caenidae	12	18	6	14	0	100	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	18	0	36	0	0	0
Isorychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	0
Placoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chaunatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chiakra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyreneus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydroptilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leproceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oeocellis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1968 -- Continued

	TOWN CREEK						AMORY MS						ABERDEEN LAKE					
	APRIL 12			JUNE 28			APRIL 12			JUNE 28			APRIL 12			JUNE 28		
	10	50*	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Bryozoa																		
Phylactolaemata																		
Pliumatellina																		
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca																		
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida																		
Corbicula manilensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supera cubensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda																		
Basommatophora																		
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda																		
Campeiaoma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nemata																		
Polyphemantes																		
Turbellaria																		
Tricladida																		
Planariidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* Number based on two samples.

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1988

	BELOW ABERDEEN L & D				MCKINLEY CREEK BENDWAY				BUTTA RIVER BENDWAY			
	APRIL 12		JUNE 28		APRIL 13		JUNE 29		APRIL 13		JUNE 29	
	10 50	90	10 50*	90	10 50	90	10 50	90	10 50	90	10 50	90
Annelida	0	0	0	0	0	0	0	0	0	0	0	0
Hirudinea												
Pharyngobdellida	0	0	0	0	0	0	0	0	0	0	0	0
Erpobdellidae												
Rhynchobdellida	0	0	0	0	0	0	0	0	0	0	0	0
Glossiphoniidae												
Oligochaeta	115	151	163	181	199	97	242	97	278	187	42	332
Plesiopora												
Branchiura soverbyi	0	0	0	0	0	0	0	0	0	0	0	0
Arthropoda												
Crustacea	0	0	0	0	0	0	0	0	0	0	0	0
Aphipoda												
Hyalella azteca												
Isopoda												
Lirceus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea	0	0	0	0	0	0	0	0	0	0	0	0
Insecta												
Coleoptera	0	0	0	0	0	0	0	0	0	0	0	0
Berosus sp.												
Dubiraphia sp.												
Dytiscidae												
Elmidae												
Optioserurus sp.												
Stenelmis sp.												
Diptera	0	0	0	0	0	0	0	0	0	0	0	0
Abilabesmyia sp.												
Bezzia sp.												
Cerstopogonidae	0	0	0	0	0	0	0	0	0	0	0	0
Chsborus sp.	6	284	36	84	0	6	139	586	0	6	24	181
Chironomidae	48	91	36	54	0	12	133	91	73	42	54	181
Chironomus sp.	0	0	12	0	115	0	24	42	0	12	6	206
Coelotanypus sp.	0	0	18	0	12	0	78	54	109	36	0	18
Cryptochironomus sp.	6	0	0	0	48	12	0	12	0	54	73	60
Dicrotendipes sp.	0	0	0	0	0	0	0	0	0	0	0	24
Einfeldia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Epococcioidius sp.												
Eukiefferiella sp.												
Glyptotendipes sp.												
Parachironomus sp.												
Pericoma sp.												

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TONBIEGE WATERWAY, 1968 -- Continued

	BELOW ABERDEEN L & D						MCKINLEY CREEK BENDWAY						BUTTA RIVER BENDWAY					
	APRIL 12			JUNE 28			APRIL 13			JUNE 29			APRIL 13			JUNE 29		
	10	50	90	10	50*	90	10	50	90	10	50	90	10	50	90	10	50	90
Polyphemidium sp.	0	0	0	0	0	0	0	6	0	0	0	0	6	0	6	0	16	
Procladius sp.	0	0	0	36	0	0	12	6	12	103	0	42	18	0	12	109	6	30
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
Tanypus sp.	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caenis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sternonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyriellus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydropsyche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocopterus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1968 -- Continued

	BELOW ABERDEEN			L & D			MCKINLEY CREEK BENDWAY			BUTTA RIVER BENDWAY		
	APRIL 12			JUNE 28			APRIL 13			JUNE 29		
	10	50	90	10	50*	90	10	50	90	10	50	90
Bryozoa												
Phylactolaemata												
Pumatellina												
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida												
Corbicula manilensis	0	0	109	0	0	0	0	0	0	0	0	0
Corbicula sp.	194	60	0	0	0	0	18	0	0	0	42	12
Rupera cubensis	0	0	0	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	0	0	0	0	0	0
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0	0
Basommatophora												
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda												
Campeloma sp.	0	0	0	0	0	0	0	0	0	0	0	0
Nemata	0	0	0	0	0	0	6	0	0	0	0	0
Platyhelminthes												
Turbellaria												
Tricladida												
Planariidae	0	0	0	0	0	0	0	0	0	0	0	0

* Number based on one sample.

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1966

	KOLOLA SPRINGS MS						TIBBEE CREEK						COLUMBUS LAKE					
	APRIL 13			JUNE 29			APRIL 13			JUNE 29			APRIL 13			JUNE 29		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Annelida																		
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pharyngobdellida																		
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhynchobdellida																		
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oligochaeta	24	6	0	86	57	57	109	423	30	60	30	181	54	36	73	18	18	18
Plesiopora																		
Branchiura sowerbyi	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arthropoda																		
Crustaceas																		
Amphipoda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalellidae																		
Isopoda																		
Lirceus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insecta																		
Coleoptera																		
Berosus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dubiraphia sp.	0	6	6	14	0	0	0	0	0	0	0	0	12	42	0	0	0	0
Dytiscidae																		
Elmidae																		
Optioservus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenelmis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diptera																		
Ablabesmyia sp.	0	0	0	0	0	0	0	14	0	18	0	0	0	24	0	12	0	0
Bezzia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratopogonidae	6	30	0	43	29	24	18	12	0	6	0	36	12	0	0	0	0	0
Chaoborus sp.	12	0	0	0	0	0	12	30	6	490	732	302	24	48	30	272	236	236
Chironoidae	42	42	54	100	229	632	91	0	30	0	6	54	18	12	0	24	18	18
Chironomus sp.	0	0	0	0	0	14	97	73	24	0	0	12	223	6	157	42	97	97
Coelotanypus sp.	0	0	6	0	0	0	0	0	0	0	0	55	0	6	48	97	73	73
Cryptochironomus sp.	0	12	0	72	14	14	0	6	12	0	0	0	61	6	12	0	0	0
Dicotendipes sp.	0	0	0	359	229	0	0	0	0	0	0	0	0	0	0	0	0	0
Einfeldia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epicoccadius sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukiefferiella sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus sp.	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1988 -- Continued

	KOLOLA SPRINGS MS									TIBBEE CREEK									COLUMBUS LAKE											
	APRIL 13			JUNE 29			APRIL 13			JUNE 29			APRIL 13			JUNE 29			APRIL 13			JUNE 29			APRIL 13			JUNE 29		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90			
Polypedilum sp.	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Procladius sp.	29	57	0	54	14	57	0	0	0	6	0	0	0	0	0	0	0	0	224	66	67	24	0	0	0	0	0	0		
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Tanyptus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Caenis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	18	60	42	6	12	12	0	0			
Hexagonia sp.	67	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cyreneillus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hydropsyche	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Oecetis avara	6	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 --- Continued

	KOLOLA SPRINGS MS						TIBBEE CREEK						COLUMBUS LAKE					
	APRIL 13			JUNE 29			APRIL 13			JUNE 29			APRIL 13			JUNE 29		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Bryozoa																		
Phylactolaemata																		
Plumatellina																		
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida																		
Corbicula manilensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	0	12	6	0	0	0	14	0	12	6	24	0	0	0	12	0	0	0
Eupera cubensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	14	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	24
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Basommatophora																		
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda																		
Campeloma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nematata	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
Polyphemidae																		
Turbellaria																		
Tricladida																		
Planariidae																		

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TENBIGHBEE WATERWAY, 1968

	BELOW COLUMBUS L & D						COLUMBUS BENDWAY						LUX CREEK					
	APRIL 18			JULY 13			APRIL 18			JULY 13			APRIL 13			JUNE 29		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Annelida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0
<i>Hirudinea</i>																		
<i>Pharyngobdellida</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eriobdellidae</i>																		
<i>Rhynchobdellida</i>	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
<i>Glossiphoniidae</i>																		
<i>Oligochaeta</i>	0	24	103	103	109	73	79	109	67	42	6	6	187	29	14	273	0	143
<i>Plesiopora</i>																		
<i>Branchiura sowerbyi</i>	0	0	0	0	0	0	6	0	36	0	12	12	12	14	0	0	14	0
<i>Arthropoda</i>																		
<i>Crustacea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Amphipoda</i>																		
<i>Hyalella azteca</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Isopoda</i>																		
<i>Lirceus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mysidacea</i>	0	0	0	0	0	0	0	0	0	0	0	12	6	0	0	0	0	0
<i>Insecta</i>																		
<i>Coleoptera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Berosus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dubiraphia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	14
<i>Dytiscidae</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Elmidae</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Optioservus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Stenelmis sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Diptera</i>																		
<i>Abribesmyia sp.</i>	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Bessia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Ceratopogonidae</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Chironomidae</i>	0	30	0	0	6	6	18	24	0	175	60	67	97	14	0	0	0	0
<i>Chironomus sp.</i>	103	60	12	0	18	0	24	30	73	36	0	0	0	43	14	0	0	0
<i>Coolotanypus sp.</i>	0	6	0	0	6	0	0	0	6	18	0	0	0	357	0	0	0	0
<i>Cryptochironomus sp.</i>	30	0	60	0	6	0	24	30	24	12	0	12	0	14	0	0	0	0
<i>Dicrotendipes sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Einfeldia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Epicoccidioides sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Eukiefferiella sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Glyptotendipes sp.</i>	127	326	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Pachyironomus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Petromyzons sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1966 -- Continued

	BELOW COLUMBUS L & D						COLUMBUS BENDWAY						LUX CREEK					
	APRIL 16			JULY 13			APRIL 18			JULY 13			APRIL 13			JUNE 29		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Polypodium sp.	0	0	18	48	0	12	66	48	0	0	0	0	0	0	0	0	0	0
Proctadius sp.	0	6	6	12	0	0	30	12	24	12	29	0	0	0	0	0	0	14
Pseudochironomus	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tanypus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caenis sp.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyrenellus fraternus	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydropsyidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1986 -- Continued

	BELOW COLUMBUS L & D				COLUMBUS BENDWAY				LUX CREEK			
	APRIL 16		JULY 13		APRIL 16		JULY 13		APRIL 13		JUNE 29	
	10	50	90	10	50	90	10	50	90	10	50	90
Bryozoa												
Phylactolaemata												
<i>Pliumatellina</i>												
<i>Pectinatella magnifica</i>	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca												
<i>Bivalvia</i>	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida												
<i>Corbicula maniliensis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Corbicula sp.</i>	30	6	6	0	0	0	6	0	12	0	0	0
<i>Eupera cubensis</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Obliquaria reflexa</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Proptera sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Psidium sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Sphaerium sp.</i>	0	0	0	0	0	0	0	0	6	12	30	48
<i>Unionidae</i>	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda												
<i>Basommatophora</i>												
<i>Ferrissia sp.</i>	0	6	0	0	0	0	0	0	0	0	0	0
<i>Mesogastropoda</i>												
<i>Campeloma sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Nemata</i>												
<i>Platyhelminthes</i>												
<i>Turbellaria</i>												
<i>Tricladida</i>												
<i>Planariidae</i>	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBE WATERWAY, 1986

	PRATT CAMP BENDWAY				ABOVE ALICEVILLE L & D				BELOW ALICEVILLE L & D			
	APRIL 18		JULY 13		APRIL 19		JULY 13		APRIL 19		JULY 13	
	10	50	10	50	10	50	10	50	10	50	10	50
Annelida												
Hirudinea	0	0	0	0	0	0	0	0	0	0	0	0
Pharyngobdellida												
Erpobdellidae	0	0	0	0	0	0	0	0	0	0	0	0
Rhynchobdellida												
Glossiphoniidae	0	0	0	0	0	0	0	0	0	0	0	0
Oligochaeta	91	48	0	0	0	16	175	157	85	151	212	12
Plesiopora												
Branchiura sowerbyi	0	0	0	0	0	67	18	24	60	85	18	0
Arthropoda												
Crustacea												
Amphipoda	0	0	0	0	0	0	0	0	0	0	0	0
Hyalella azteca												
Isopoda												
Lirceus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Mysidacea												
Insecta												
Coleoptera												
Berosus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Dubiraphia sp.												
Dytiscidae												
Eumidae												
Optioservus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Stenelmis sp.	0	0	0	0	0	0	0	0	0	0	0	0
Diptera												
Abobbiesvia sp.	0	0	0	0	0	6	0	0	12	6	0	0
Berria sp.	0	0	0	0	0	0	0	0	0	0	0	0
Caratoponidae	6	6	0	0	0	24	6	60	12	0	12	0
Chaoborus sp.	42	115	127	810	387	290	12	181	42	36	73	0
Chironomidae	30	18	0	0	0	0	0	236	97	30	115	79
Chironomus sp.	6	97	73	6	0	0	0	36	12	393	6	54
Coelotanypus sp.	30	18	6	0	0	24	24	24	151	24	72	18
Cryptochironomus sp.	12	6	6	0	0	0	0	73	18	0	42	6
Dicrotendipes sp.	0	6	6	0	0	24	0	0	0	0	0	6
Einreldia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Epococciidius sp.	0	0	0	0	0	0	0	0	0	0	0	0
Eukiefferiella sp.	0	0	0	0	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	0	0	0	0	0	0	0	0	0	0
Parachironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1966 -- Continued

	PRATT CAMP BEND DAY						ABOVE ALICEVILLE L & D						BELOW ALICEVILLE L & D					
	APRIL 18			JULY 13			APRIL 19			JULY 13			APRIL 19			JULY 13		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Polypodium sp.	0	0	0	0	0	0	85	0	0	42	67	0	30	30	24	12	48	
Pseudochironomus sp.	60	157	139	0	0	0	67	193	85	6	12	6	0	0	0	6	0	
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tanypterus sp.	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	6	6	6	0	0	0	
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Caenis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Calibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chumatasycne sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cyrenellus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydroptilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phylacentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 -- Continued

	PRATT CAMP BENDWAY			ABOVE ALICEVILLE L & D			BELOW ALICEVILLE L & D		
	APRIL 16			APRIL 19			APRIL 19		
	10	50	90	10	50	90	10	50	90
Bryozoa									
Phylactolaemata									
Pilumellina									
Pectinatella magnifica	0	0	0	0	0	18	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	6	0	0	0
Heterodontida									
Corbicula manilensis	0	0	0	0	0	30	0	0	0
Corbicula sp.	0	0	0	0	0	0	12	0	0
Eupera cubensis	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	30	6	0
Unionidae	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0
BasomatoPhora									
Ferrissia sp.	0	0	0	0	0	0	0	0	0
Mesogastropoda									
Campeloma sp.	0	0	0	0	0	0	0	0	0
Nematata	0	0	0	0	0	0	0	0	0
Platyhelminthes									
Turbellaria									
Tricladida									
Planariidae	0	0	0	0	0	0	0	6	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1988

	BIG CREEK BENDWAY						COOKS BENDWAY						ABOVE GAINESVILLE L & D					
	APRIL 19			JULY 14			APRIL 19			JULY 14			APRIL 19			JULY 14		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Annelida																		
<i>Hirudinea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0
<i>Pharyngobdellida</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Erpobdellidae</i>																		
<i>Rhynchobdellida</i>	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Glossiphoniidae</i>																		
<i>Oligochaeta</i>	175	230	169	133	332	356	0	369	290	6	18	266	230	502	121	169	48	
<i>Plesiopora</i>																		
<i>Branchiura sowerbyi</i>	0	0	30	0	0	0	0	0	18	0	0	0	0	0	0	73	30	24
Arthropoda																		
<i>Crustacea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Aphipoda</i>																		
<i>Hyalella azteca</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Isopoda</i>																		
<i>Lirceus sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Mysidacea</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insecta																		
<i>Coleoptera</i>																		
<i>Berosus sp.</i>																		
<i>Dubiraphia sp.</i>																		
<i>Dytiscidae</i>																		
<i>Eimidae</i>																		
<i>Optioserurus sp.</i>																		
<i>Stenelmis sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Diptera</i>																		
<i>Ablabesswvia sp.</i>																		
<i>Bezzia sp.</i>																		
<i>Ceratopogonidae</i>																		
<i>chaoborus sp.</i>	24	36	151	72	18	0	0	0	18	6	6	6	6	0	272	127	6	49
<i>Chironomidae</i>	24	36	6	54	18	0	30	91	103	0	0	0	0	0	0	36	0	18
<i>Chironomus sp.</i>	0	0	24	0	0	0	0	73	60	121	18	0	0	0	0	127	0	12
<i>Coelotanypus sp.</i>	6	0	145	6	0	0	0	127	520	115	42	54	48	0	0	223	6	24
<i>Cryptochironomus sp.</i>	24	54	60	66	0	6	0	0	6	0	0	0	0	0	0	0	6	6
<i>Dicranotanypes sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Einfeldia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Epicoccidioides sp.</i>																		
<i>Eukiefferiella sp.</i>																		
<i>Glyptotendipes sp.</i>																		
<i>Parachironomus sp.</i>																		
<i>Pericoma sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 -- Continued

	BIG CREEK BENDWAY						COOKS BENDWAY						ABOVE GAINESVILLE L & D					
	APRIL 19			JULY 14			APRIL 19			JULY 14			APRIL 19			JULY 14		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Polypodium sp.	61	97	78	0	0	0	0	0	0	0	0	0	48	0	24	18	6	
Procladius sp.	67	24	85	0	0	0	42	0	0	0	0	0	30	0	12	12		
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sinuiliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	6	6	24	0	0	
Tanypus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cannis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Calibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hexagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hexagenia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cotixidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Odonata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Petithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Perlaeidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chaumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cyreneus fraternus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hydroptilidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Oecetis sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Phylcentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEW WATERWAY, 1986 -- Continued

	BIG CREEK BENDWAY						COOKS BENDWAY						ABOVE GAINESVILLE L & D					
	APRIL 19			JULY 14			APRIL 19			JULY 14			APRIL 19			JULY 14		
	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90	10	50	90
Bryozoa																		
Phylactolaemata																		
Plumatellina																		
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca																		
Bivalvia																		
Heterodontida																		
Corbicula maniliensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	18	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eupera cubensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda																		
Basommatophora																		
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda																		
Campeloma sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nematata																		
Platyhelminthes																		
Turbellaria																		
Tricladida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planariidae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGBEA WATERWAY, 1968

	GAINESVILLE AL				ABOVE DEMOPOLIS L & D			
	APRIL 20		JULY 14		APRIL 20		JULY 14	
	10	50	90	10	50	90	10	50
Annelida								
Hirudinea	0	0	0	0	0	0	0	0
Pharyngobdellida	0	0	0	0	0	0	0	0
Erpobdellidae	0	0	0	0	0	0	0	0
Rhynchobdellida	0	0	0	0	0	0	0	0
Glossiphoniidae	0	0	0	0	0	0	0	0
Oligochaeta	188	127	36	103	115	109	242	1,910
Pleisopora							1,245	66
Branchiura sowerbyi	0	0	0	36	30	6	24	97
Arthropoda							18	0
Crustacea	0	0	0	0	0	0	0	0
Amphipoda	0	0	0	0	0	0	0	0
Hyalella azteca	0	0	0	0	0	0	0	0
Isopoda	0	0	0	0	0	0	0	0
Lirceus sp.	0	0	0	0	0	0	0	0
Mysidacea	0	0	0	0	0	0	0	0
Insecta								
Coleoptera	0	0	0	0	0	0	0	0
Beroius sp.	0	0	0	0	0	0	0	0
Dubiraphia sp.	0	0	0	0	0	0	0	0
Dytiscidae	0	0	0	0	0	0	0	0
Elmidae	0	0	0	0	0	0	0	0
Optioservus sp.	0	0	0	0	0	0	0	0
Stenelimis sp.	0	0	0	0	0	0	0	0
Diptera								
Ablabesmyia sp.	0	0	0	0	0	0	0	0
Buzzia sp.	0	0	0	0	0	0	0	0
Ceratopogonidae	0	0	0	6	6	0	0	0
Chaoborus sp.	0	0	0	48	24	18	54	6
Chironomidae	18	42	0	18	42	55	42	145
Chironomus sp.	0	0	0	6	0	0	30	0
Coelotanypus sp.	0	0	0	85	48	42	0	139
Cryptochironomus sp.	18	66	12	0	0	18	24	12
Dicrotendipes sp.	0	0	0	0	0	0	54	0
Einfeldia sp.	0	0	0	0	0	0	0	0
Epicoccidioides sp.	0	0	0	0	0	0	0	0
Eukiefferiella sp.	0	0	0	0	0	0	0	0
Glyptotendipes sp.	0	0	0	0	0	0	0	0
Parachironomus sp.	0	0	0	0	0	0	0	0
Pericoma sp.	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMBIGEE WATERWAY, 1988 --- Continued

	GAINESVILLE, AL						ABOVE DEMOPOLIS L & D					
	APRIL 20			JULY 14			APRIL 20			JULY 14		
	10	50	90	10	50	90	10	50	90	10	50	90
Polypodium sp.	0	0	0	12	6	6	36	0	42	0	0	0
Procladius sp.	0	6	6	6	12	0	12	333	48	30	30	12
Pseudochironomus	0	0	0	0	0	0	0	0	0	0	0	0
Simuliidae	0	0	0	0	0	0	0	0	0	0	0	0
Stenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Stictochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Taenypus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Xenochironomus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Ephemeroptera	0	0	0	0	0	0	0	0	0	0	0	0
Baetidae	0	0	0	0	0	0	0	0	0	0	0	0
Baetis sp.	0	0	0	0	0	0	0	0	0	0	0	0
Cænis sp.	0	0	0	0	0	0	0	0	0	0	0	0
Callibaetis sp.	0	0	0	0	0	0	0	0	0	0	0	0
Haxagenia bilineata	0	0	0	0	0	0	0	0	0	0	0	0
Haxagenia sp.	0	0	0	18	6	6	30	139	0	0	0	0
Isonychia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Stenonema sp.	0	0	0	0	0	0	0	0	0	0	0	0
Tricorythodes sp.	0	0	0	0	0	0	0	0	0	0	0	0
Hemiptera	0	0	0	0	0	0	0	0	0	0	0	0
Corixidae	0	0	0	0	0	0	0	0	0	0	0	0
Megaloptera	0	0	0	0	0	0	0	0	0	0	0	0
Sialis sp.	0	0	0	0	0	0	0	0	0	0	0	0
Odonata	0	0	0	0	0	0	0	0	0	0	0	0
Argia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Corduliidae	0	0	0	0	0	0	0	0	0	0	0	0
Enallagma sp.	0	0	0	0	0	0	0	0	0	0	0	0
Gomphidae	0	0	0	0	0	0	0	0	0	0	0	0
Perithemis tenera	0	0	0	0	0	0	0	0	0	0	0	0
Plecoptera	0	0	0	0	0	0	0	0	0	0	0	0
Perlidae	0	0	0	0	0	0	0	0	0	0	0	0
Trichoptera	0	0	0	0	0	0	0	0	0	0	0	0
Cheumatopsyche sp.	0	0	0	0	0	0	0	0	0	0	0	0
Chimarra sp.	0	0	0	0	0	0	0	0	0	0	0	0
Cyrenella fraternus	0	0	0	0	0	0	0	0	0	0	0	0
Hydropsytilidae	0	0	0	0	0	0	0	0	0	0	0	0
Leptoceridae	0	0	0	0	0	0	0	0	0	0	0	0
Oecetis avara	0	0	0	0	0	0	0	0	0	0	0	0
Phyllocentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0
Polycentropus sp.	0	0	0	0	0	0	0	0	0	0	0	0

BENTHIC MACROINVERTEBRATE MEAN DENSITIES (NUMBER/SQUARE METER) FOR THREE REPLICATE SAMPLES
IN THE AREA OF THE TENNESSEE-TOMIGEE WATERWAY, 1988 -- Continued

	GAINESVILLE AL						ABOVE DEMOPOLIS L & D					
	APRIL 20			JULY 14			APRIL 20			JULY 14		
	10	50	90	10	50	90	10	50	90	10	50	90
Bryozoa												
Phylactolaemata												
Plumatellina												
Pectinatella magnifica	0	0	0	0	0	0	0	0	0	0	0	0
Mollusca	0	0	0	0	0	0	0	0	0	0	0	0
Bivalvia	0	0	0	0	0	0	0	0	0	0	0	0
Heterodontida												
Corbicula manilensis	0	0	0	0	0	0	0	0	0	0	0	0
Corbicula sp.	6	12	0	0	0	0	6	6	61	6	0	0
Eupera cubensis	0	0	0	0	0	0	0	0	6	0	0	0
Obliquaria reflexa	0	0	0	0	0	0	0	0	0	0	0	0
Proptera sp.	0	0	0	0	0	0	0	0	0	0	0	0
Psidium sp.	0	0	0	0	0	0	0	0	0	0	0	0
Sphaerium sp.	0	0	0	0	0	0	0	0	103	30	0	0
Unionidae	0	0	0	0	0	0	0	0	0	0	0	0
Gastropoda	0	0	0	0	0	0	0	0	0	0	0	0
Basommatophora	0	0	0	0	0	0	0	0	0	0	0	0
Ferrissia sp.	0	0	0	0	0	0	0	0	0	0	0	0
Mesogastropoda												
Campeloma sp.	0	0	0	0	0	0	0	0	0	0	0	0
Nematata	0	0	0	0	0	0	0	48	0	0	0	0
Platyhelminthes												
Turbellaria												
Tricladida												
Pianariidae	0	0	0	0	0	0	0	0	0	0	0	0